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For July, 1936

SECTION I—EDUCATIONAL ADMINISTRATION Looking Forward..... THE EDITOR has something—in fact, a great deal—to say about the championship cult; he also considers the witch-hunting being done by local school boards, better institute programs, the continued appeal of automobile manufacturers to the youthful appetite for speed, and New Orleans as a meeting place for the Department of Superintendence, sonville, Fla., uses the community as a training center and enlists the public as a partner. R. C. MARSHALL, superintendent of public instruction in Duval County, describes the movement. Superintendent's Weekly..... To determine prevailing practice regarding the bulletin as a connecting link between administrator and staff, H. N. Mc-CLELLAN, director of curriculum and publication for the public schools of Berkeley, Calif., made the survey here reported. Billions Needed for Buildings..... "After we have filled up the hole in public school administration to the tune of nearly \$5,000,000,000, we must be prepared to make a basic annual outlay of not less than \$330,000,000 to maintain the existing plant and make improvements," states WALTER N. Polakov, industrial diagnostician, FERA. townspeople the issues pointed up by the Committee on Orientation of Secondary Education. Engineers Are Not Miracle Men..... A planning consultant's plea to schoolmen, by EARL HANSON of the National Resources Committee, Washington, D. C. Regional and national planners need the help of school administrators who have the plant, equipment and technique for making clear to people the things they need to know in order to adapt themselves to their own changing worlds. superintendent of schools, Duncan, Okla. Experiment in Character Training..... In Jamestown, N. Y., they prepared a syllabus on character education but the teachers did not get the hang of it. A teachers' committee then drew up a code of ethics based on the syllabus. SUPT. GEORGE A. PERSELL tells how helpful the code is proving. The solution of the autumn sports program in the small high school seems to lie in the game described by Supt. F. L. Showacy of the public schools of Alexandria, Neb. Making Friends for the School..... What an alert English teacher can do in the way of social interpretation is suggested by LELAND B. JACOBS, supervisor of English

at the Lincoln Consolidated Training School, Michigan State

Side Glances-

T HIS is to Certify that Lorenzo Gaylord for Punctual Attendance and Good Conduct merits the approbation of his friends and instructor."

A pleasant chapter in nineteenth century educational history may be written on the Rewards of Merit given the Good Boy and the Good Girl. Harry B. Weiss, chief of the bureau of plant industry, Department of Agriculture, Trenton, N. J., makes a readable contribution to the subject in an article for the August issue, after having studied 1,400 "rewards" in various collections. The charming illustrations are from the collections of the American Antiquarian Society and of Lillian Newton Stone.

ALL the prattle about educating for a new social order is empty talk while the worst practices of the old social order govern the spirit and ethics of school sports, declares Carlton Palmer of Long Island City, N. Y., in a spirited article for the next issue.

If a pupil steals or is dishonest in the classroom, school officials are gravely shocked, but if his behavior on the athletic field outrages the same principles they may consider him clever, Mr. Palmer charges. Where high pressure coaching is absent, conditions are better, for the boys, it seems, prefer to play games squarely.

"AUTOBIOG-

RAPHY of a Superintendent" is also scheduled for summer reading. Signed by a fictitious name, this unique portrait is not of a single individual but is a true composite portrait drawn from several thousand living men.

F. H. Bair of Shaker Heights and

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Normal College.

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Bronxville presented a doctoral dissertation to Columbia University two or three years ago entitled "The Social Understandings of the Superintendent of Schools." He has now reversed his former technique. Having ground down the Superintendent into a Tabulation, he now conjures the Tabulation into a Person. Read it and see yourself.

THE autocrat in the superintendent's office, the autocrat in the principal's chair, the autocrat of the classroom—at all of these Leonard L. Bowman, high school vice principal at Santa Barbara, Calif., takes a shot in an article for August.

"We preach democracy in our classrooms but our preaching is oftentimes decidedly counteracted in the pupils' mind by the organization of the school itself, and what we do speaks louder than what we preach."

"THE Custodian

Takes the Stage" in the next number — not as actor or dramatist but as designer of sets. W. F. Currington of Jackson, Ohio, presents some splendid suggestions for the custodian who would make his services more valuable next term.

For example, the article gives directions and photographs for turning the gymnasium into a banquet room or hall for dancing by means of a false ceiling. Since the material costs only \$10 and free pupil labor is available, principals and teachers, as well as custodians, will be approving readers.

SHOULD we build our schools to last a century or should part of our expansion be of semipermanent nature capable of breakdown and relocation?

In an article for the coming issue, G. E. Irons, director of school housing and boundaries for Cleveland, puts these questions after presenting figures to show how shifting is the population in our large cities. Some school districts become gradually depopulated as time passes, while others increase at their expense.

Our Developing School Law What is the why of the South's many lawsuits? Is it quarrel- someness, or much recent progressive legislation? M. M. CHAMBERS asks these questions while answering others on the incidence of school litigation.	29
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LOOKING FORWARD

Something About Championships

P UBLIC EDUCATION appears to be slowly disintegrating into a series of championships. Each spring reports from different states indicate increase in type and number of championship contests held by schools. Teachers and laymen alike are beginning to look with serious misgivings on the uncontrollable giant that administration has unconsciously developed.

Athletic champions are familiar to all. The exploitation of the immature secondary school boy and girl to satisfy a carefully nurtured communal desire for a winner and to enhance the reputation of the coach is too familiar to need more than mere mention. Championship ventures into new areas do not appear so significant to the casual view and have not been massed to receive the same spectacular attention. The current list includes regional, state and national championships in performance on academic achievement tests; state educational round-ups; regional and state debating; all publications, including weekly papers and yearbooks; instrumental and vocal music; local and national spelling contests, and special prize contests sponsored by commercial or propaganda organizations.

These championship contests are theoretically assumed to be purely amateur performances and, with the exception of athletics, had their inception in the field of interpretation of the school to the community. Teachers and administrators, seeking means to convince the community of the school's worth and value, turned to the always dramatic element of individual or group struggle. At the same time interest-groups beyond the school recognized the publicity values accruing to sponsorship and found their services in demand. When the professional had some real doubts as to the educational value of these activities, a little pressure was sufficient to force the issue. If the value of these contests lies in their educational and interpretative values, it may be well to examine the results.

The purpose of education is the instruction of all individuals in terms of their inborn capacities by methods that stress the scientific and social aspects of the educational process. Heavy competition, stimulated by the institutional urge to win, is hardly compatible with this philosophy of instruction. The urge to win further complicates the instructional problem by placing on the individual teacher the responsibility for producing winners. Faced with this immediate need teachers naturally adjust their aim from the instruction of all in terms of capacity to the stimulation and coaching of those who show the most promise.

State and national spelling contests are examples. Visits to an elementary school in any participating state from January until the spring contests will show that the teaching technique is pointed completely to developing the winning speller, while the rest of the class receives little attention. Elimination rather than growth and development of all pupils is the general rule. The children, through rallies and "pep" talks, are placed under the same unnatural emotional strain that our championship athletes are. From the standpoint of mental hygiene immature children are stimulated beyond reason, emotionally disturbed and shaken, and their normal orientation distorted by unbalanced publicity and ballyhoo. Since in some school systems teachers are appraised in terms of championships won, the teachers also become disturbed and jittery.

In the matter of music contests, the preparation of bands, orchestras and glee clubs for "prize contests" eliminates from teaching practically all of the fundamental values of music as a fine art. Again, emphasis is naturally placed on the more capable and the rest are either eliminated or "just sit by and toot." Mechanical perfection is developed with certain compositions practiced to such a degree that even the participants cry out in revolt against the process. Field days and contests in music in several states are now ranked with hog-calling and are exploited through fairs.

In debating, the spirit of amateurism has so obviously broken down that everyone except the lay audience is aware of it. For the most part the speeches are written by the debating coach or "speech trainer." Strategy and techniques are worked by these coaches just as the football mentor devises plays. Different closing arguments and rebuttals are developed and learned. Coaches in the audience signal change of pace and selection of

alternate material. The use of tricks, including names spelled backwards to represent important foreign authorities, is classified as strategy. In reality most of the contesting debaters are simply puppets operated by a professional coach.

As several principals and superintendents have aptly described the securing of publications' championships, the first steps are to contract for a good printing teacher (if the school has its own shop) and a seasoned instructor in journalism. If the latter has had professional newspaper experience and has a flair for mechanical makeup, so much the better. The school publications, extremely valuable as spontaneous and amateur terminal expressions of educational activities, immediately are frozen into standard and conventional patterns highly imitative of commercial publications. They may win championships but they amount to little educationally.

From the standpoint of amateurism, the academic field days more closely approach this spirit than the other contests. These at least are apparently mass contests and, although of dubious validity educationally, are far and above the others in honesty of execution.

Who profits through these championships? Most immediately the extra-institutional sponsors. Newspapers have made athletics and spelling bees their own as circulation stimulators, and the school becomes either a conscious or unconscious tool in advancing the private interests of commercial papers.

Institutions of higher learning, including both universities and teachers' colleges, in different sections of the country also exploit the public schools in publications, debating and music championships. Sometimes these sponsorships are conceived as public relationships to attract students to higher institutions. Competition for students is keen these days and any activity that brings them in must be seriously considered by the publicity division. Special teaching divisions, such as speech and music, in other places stimulate the contests while certain professional fraternities, particularly groups in journalism, are overzealous for their place in the sun. Many other interest-groups are also involved in different places. However, the profession seems to be a little skeptical concerning them. The university that attempts to serve its own interest by exploiting children in championships is no more worthy than the power utility that seeks to stimulate the use of more electricity through better lighting contests. The difference between them is one of degree only.

The championship cult is decidedly a liability to the school as a social institution. Once a community has become inoculated with the championship germ, it will not rest content. There must be winners every year. The village poolroom, the chamber of commerce and the service clubs insist upon it. The long train of teachers departing annually from positions because they could not produce champions is a dismissal cause that tenure-

minded groups should study more carefully. Educationally, the emphasis on championships is hazardous. As an activity, it does not conform to modern educational philosophy or methods. It is progressively disintegrating as more and more emphasis is made within the institution to point for these championships. If these practices are analyzed in terms of their interpretative value to the schools, the answer must be strongly negative. It is a high-spot appeal that finally evolves into a vicious circle with the institution strictly on the defensive.

The nub of the entire process of social interpretation is the continued education of the adult to the purpose, value, conditions and needs of public education. The exploitation of children is not a legitimate interpretational activity. The championship cult has a minute place, if any, in a solid program of community education. It should be progressively discouraged by the teaching profession. Its promotion and continuance hold nothing but danger to the future of teaching.

Freedom to Teach

FULL publicity should be given to every effort of local boards of education to consider the private and social life of the teacher outside of school as a basis for appraisal in the renewal or nonrenewal of teaching contracts. To the extent that newspaper reports may be considered reliable, there appears to be almost an epidemic of witch-hunting in practically every section of the country.

It is the professional assumption that every teacher worthy of the name realizes the judicial character of the school as a social institution and is able to present all viewpoints on even seriously controversial issues without propagandizing for any special method or plan. Inability to divorce one's personal religious, political, sociologic and economic views from classroom presentation must be considered as evidence of emotional incompetence to perform the duties of the teacher. Rational objectivity is essential to good teaching.

Beyond the classroom the teacher should have the same freedom to make affiliations, present points of view and take sides that any other citizen has. The right to join a political party, to become aggressively partisan, to take active part in the orderly process of democratic government and to exert to the full individual possibilities of leadership must not be denied to the teacher by school board members as individuals or while sitting as a legislative body.

To assume in a Democratic community that a Republican teacher is incapable of acting as a teacher or that a member of the Socialist party is too biased to teach in a community dominantly Republican approaches absurdity. If political affiliation can be made a reasonable cause for dismissal, there is nothing to hinder approach to the second step, discrimination with respect to re-

ligious beliefs. In fact, a number of communities scattered throughout the country have already given serious attention to this subject. To assume that members of the Unitarian, Jewish or Catholic faiths are incompetent to teach without permitting their religion to color classroom viewpoints is an indictment against the entire teaching profession. From religious grounds to the questioning of economic beliefs is a short third step. And so on! Once the premise of incompetency is granted by examination into personal beliefs and conduct, there is nothing to hinder the complete destruction of freedom of teaching and of the teaching profession.

Without constant insistence upon the right to exercise its agitative liberties the teaching profession is in serious danger of losing its birthright and its guardianship of these fundamental principles essential to free education in a democracy. From the practical standpoint it must be well considered that so long as the teachers remain disunited there is little or no possibility of maintaining academic independence. It is easy for a local board of education to pick off one teacher after another while the group looks on with little interest and makes no effort to protest. The strength of the individual is the strength of the group. Until teachers are willing to organize into strong local and state guilds to preserve democratic principles there will be an increase in sniping. The second job is to form an intelligent backlog of informed opinion within each community.

For Better Programs

Professional organizations are now in the process of making next fall's regular and institute programs. These occasions present unusual opportunities to acquaint teachers with vital problems of the day. Little advantage appears to be taken of these opportunities by those in charge of the plans. Instead of developing programs first and then fitting in speakers to meet specific needs of the program, the typical procedure is to secure one or two "names" and ask them to speak. What the teachers want to hear and what the program is expected to do seem to have little bearing. Even when prospective speakers are curious enough to ask questions in order to adjust their efforts more closely to needs, the general answer is vague. As a result the typical professional program is generally too long, too dull, too abstract, too emotional, too inspirational, and usually far away from practical requirements.

Started early enough, it should be easily possible to build a program specifically around the teacher's needs and then to secure speakers who will fit into the plan and be able to produce the desired results. Buying big names, unless these better publicized individuals are capable of making a real contribution, is a poor way to spend money. It is also a definite reflection upon the teaching profession that it produces so few effective

speakers. Exceptions to this statement is the natural desire of a group to hear and meet well known writers and philosophers. One of the real jobs of the state program committee would appear to be searching for new personalities and speaking possibilities and providing essential training for them.

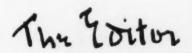
Less Emphasis on Speed

With many other governmental and voluntary agencies, to meet the increasing problem of automobile accidents and fatalities, their efforts are constantly nullified by the perversive advertising of automobile manufacturers. So long as the producers of these machines emphasize speed as the essential and vital quality of their product, drivers will be tempted to prove the oft repeated statements that have been impressed into their consciousness with all the skill that a combination of colorful drawing, writing and psychology can produce. Teaching safety in driving under these conditions is like asking the teacher of English to compete with our radio comedians in English usage! It is practically impossible.

It is probably a fact that manufacturers will continue to build automobiles with too much power for current roads and drivers simply because they have built a desire that is now hard to control. Having made this serious mistake, they might at least attempt partial correction by pointing of announcements to something else than speed. The continued appeal to the youthful appetite for speed is just as immoral as the appeal of the dope peddlers to other appetites of youth.

Superintendence Goes South

NE of the values of the annual Department of Superintendence meetings is to stimulate educational thinking in those areas affected directly by the meeting. Were it not for this fact, it might be well to confine the meeting to one or two cities capable of providing the best facilities. In going from one section of the country to another it must be obvious to all that physical accommodations will not be perfect in all cases. The executive committee wisely decided to go into the deep South for the 1937 meeting. New Orleans, one of the few Southern cities with a distinct atmosphere, was chosen as the place. The city's invitation was supplemented by a general invitation from a group of representative city superintendents below the Mason and Dixon's line, all of which leads us to believe that our Southern colleagues are planning to make this gathering outstanding in the annals of the department. The executive committee chose wisely.



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By R. C. MARSHALL

Learning on the Job

Pupils go to school and to work the same day in a Florida county

HE plan of vocational guidance as it is developed in the Part-Time School of Jacksonville, Fla., owes its existence to the conception of education as a cooperative enterprise incumbent upon the people as well as upon the school authorities. By using the community as a training center and enlisting the public as a partner in furthering the movement, the mighty force of public sentiment is directed toward the school instead of against it.

Two years ago the superintendent and board of public instruction issued invitations to a banquet held in one of the leading hotels of the city, the purpose of which was to bring together prominent school men in the state to confer with the local school authorities upon the launching of the new project.

How the Plan Works

The result of these proceedings was the tentative approval of the plan by the state board of education, provision of ample funds to operate the program, and the election by the local board of a coordinator whose chief duty is to correlate the class instruction and the practical experience of part-time pupils.

The Jacksonville plan ensures the graduate of definite vocational training in a specific occupation and a high school diploma without closing his educational program in the event he desires to go to college. Through arrangements with employers and parents, pupils in their junior and senior years of high school enter the various training agencies cooperating with the schools. There they obtain training in occupations of their

choice under real conditions for four hours a day, five days a week; this makes four full semester hours of work.

The pupils also spend from two to three hours each day in one of the three senior high schools of the city, receiving the regular academic training required of juniors and seniors for high school graduation. They spend from one to two hours each day five days a week in the vocational school studying the technical subjects directly related to the job. Diplomas are issued twice each year to those completing two years of cooperative training.

Two advisory committees were formed. One is composed of bankers and professional, industrial, business and civic club leaders of the community and school officials; its function is to give advice and to promote the general activities of the The other committee, program. composed of one or more leaders in the field of training, is known as the occupational committee. Its purpose is to assist the coordinator in the selection of pupils desiring to enter the occupation, in the development of instructional material and in the correlation with the occupation of the related and technical information given in school. The assistant principal in each school is a member of both committees.

Coordinator's Task Is Heavy

The coordinator is a member of all committees. He is employed at full-time to promote interest in the undertaking, arrange the various phases of the program, develop and organize instructional material and correlate the information given in the school with that of particular phases of the occupation in which the pupil is engaged. With the advice and approval of the employer, he arranges the schedule by which the pupil progresses through the various training stages in the occupation or business,

So that he may carry out the program effectively, the coordinator is given complete supervision of the work done by pupils during the two related subject periods.

Representatives of the occupations or businesses proposing to participate in the training of boys and girls meet with representatives from the vocational school to interview each applicant, who must appear with his parents or guardian. Pupils are selected on the basis of their mental and physical qualifications for the occupation they wish to enter. The committee investigates the seriousness of purpose and integrity of all pupils seeking admittance to the course and uses every means possible to facilitate the intelligent and correct placement of pupils, the coordinator acting in some instances as mediator between parent and pupil when differences arise regarding the choice of occupation.

Interviews with pupils are, as a rule, conducted at the high school in



These Florida high school girls are learning the routine of office practice in a local insurance agency, while the boy has a try at the hotel desk.

which the pupils are enrolled. A method of individual selection is employed whereby certain pupils who the principals know are qualified to fill a training position are permitted to meet with the committee.

An agreement between the parents of pupils employed under the provisions of the cooperative vocational school and the board of public instruction sets forth the conditions under which the pupils will be employed.

The plan presents no conflict with labor in that the pupil performs minor tasks for his employer for which he receives no salary, but gains practical instruction and experience. Except in cases of emergency, he is not found on any one job beyond the period of mastery, the training agency agreeing not to employ any pupil for less than two consecutive school terms and not to eliminate any regular employee because of the services the pupil may render.

The parent agrees to the arrange-







Through actual participation in industrial chemistry, auto mechanics and laboratory technique these pupils are receiving occupational experience. This supplemented by academic work and vocational courses prepares them for a place in the economic world.



ment whereby the pupil remains in the vocational school until the regular training period has expired, not less than seven hours a day, five days a week in the vocational school being required. The parent agrees not to withdraw the pupil from the cooperative vocational school without the approval of the board, which may authorize the removal of a pupil if he fails to demonstrate progress in his chosen field.

The line of travel through the curriculum varies with the individual pupil. Considering each of the educational levels—elementary, junior high, senior high and college—the pupil may enroll in the cooperative school and enter employment without interrupting his general educational program in the event he may wish to continue his formal education at any time.

In the elementary school the pupil is presented with the fundamentals of living necessary for producer and consumer intelligence before entering the junior high, where he explores his own interests and receives guidance training that will enable him to coordinate both his interests and abilities in the light of the requirements for the various fields in which he may make a living.

At the beginning of his sophomore year, every pupil is confronted with the problem of going to work or continuing his formal education. The latter alternative resolves itself into two phases regarding his line of travel, whether to enroll in the vocational school or in the academic high school. If he selects the cooperative vocational program, the course of study outlined emphasizes aspects of work different from the requirements imposed upon those who expect to enter college.

At the end of the sophomore year, the pupil may register for the college preparatory course or go into industry, or he may enroll in the vocational school for the junior and senior years, where he has a choice of training in industry, commerce, home economics or trade. From the cooperative school he may go into industry or continue his academic work in an institution of higher learning.

The cost to the local community of the cooperative type of program is extremely low in that the school uses business and industrial establishments for laboratories, the teaching of related and technical subject matter being done in the school without additional equipment or space. This arrangement is especially desirable because it affords an opportunity for pupils to work with modern equipment, methods and processes. The cost is further reduced through a cooperative arrangement with the state and federal governments, whereby local communities are being reimbursed in part for salaries of instructors and coordinators.

To ascertain the reaction of the various groups associated with the cooperative school, the coordinator made a careful survey of the field after the plan had been in operation one semester. Of the twenty-six pupils registering for the course only three wished to discontinue the training during the coming year. The reason assigned in each case was lack of time to prepare the regular academic subjects and maintain efficiency on the job, more time being required in two instances because of the necessity of increasing the number of academic high school subjects in order to secure sufficient credits for graduation.

Principals Are Enthusiastic

High school principals have wholeheartedly supported the plan, assuming the responsibility for preliminary procedure for the job placement. The administrative officers of the senior high schools see that home room teachers and department heads adapt courses of study and periods of recitations to the needs of the cooperative pupil and that credits are secured in the occupational field, transferred to the academic high school in which the pupil is enrolled and duly recorded for graduation.

Guidance possibilities, although not definitely provided for in the



This is Pupil Hannah Phillips at work in an insurance office.

program, are an important by-product of vocational instruction. It is generally concluded that the best type of guidance is actual participation, which carries to the individual pupil definite experiences on which to make a decision as to the selection of a life work. When a pupil carefully considers the different fields of employment in which to be trained, he does more serious thinking than he would likely experience from reading about the occupation. With this plan the pupil, after selecting the desired training, is placed in the real relationship of an employee under an employer.

The employers have shown themselves more than willing to view the program from an educational angle by assisting in every way to outline the training to be given, no training agency having shown a disposition to exploit the pupil. Notwithstanding the fact that in all cases it is necessary for the training agency to expend more than it receives during the first part of the training period, the employers enter heartily into conjunction with the plan, foreseeing that the future benefit anticipated from well selected and carefully trained employees will more than compensate for present deficiencies occasioned by inexperienced workers. The coordinator arranges for placements to be made only with firms that offer full cooperation with the plan.

Occupational experience, we have found, teaches the pupil that desultory or spasmodic habits of work will not be tolerated in a well-organized workshop. Employers who insist upon such habits and attitudes as perseverance, punctuality, self-reliance, neatness, accuracy, honesty and loyalty tend to awaken in the pupil a sense of social responsibility that is sometimes difficult to attain in the regular routine of the average secondary school.

Helps Pupil Evaluate School

Furthermore, the cooperative plan assists the pupil to evaluate his school program, for he is able to see the connection between the course of instruction and his work.

Opportunity for part-time work frequently gives the pupil a broader understanding of the function of the school as a medium of development. It lessens the shock of transfer from high school to the world of work, and prevents many mistakes and failures from lack of training and experience.

Superintendent's Weekly

By H. N. McCLELLAN

N MOST of the larger school systems the weekly bulletin issued by the superintendent's office is an important connecting link between the administration and the staff. It usually contains statements of administrative policy, announcements of general and special meetings, di-

Table I—Analysis of Four Issues Each of Twelve Weekly Superintendents' Bulletins Issued During February to May, 1935

City	Printed	Mimeo.	$\begin{array}{c} Average \\ No. \ Pp. \end{array}$	Page Size	Title
Akron		x	4	8½ x 11	Calendar
Berkeley		x	6.5	8½ x 11	Bulletin
Boise		x	2.5	8½ x 11	Bulletin
Des Moines		x	3.5	8½ x 11	General Bulletin
Fresno		x	2	$8\frac{1}{2} \times 14$	Superintendent's Bulletin
St. Paul		x	1	8½ x 11	School Bulletin
Sioux City		x	5.5	$8\frac{1}{2} \times 13$	General Circular
Spokane		X	5	$8\frac{1}{2} \times 12$	Supervisory Bulletin
Oakland	x		8	6 x 9	Superintendent's Bulletin
San Diego	Ж		4	6 x 9	Superintendent's Bulletin
San Francisco	x		4	8 x 11	Public School Bulletin
Minneapolis	x		4	8½ x 11	School Bulletin

TABLE II—Percentage Analysis of Contents of Four Issues Each of Twelve Weekly Superintendents' Bulletins

Figures give percentage of total space in each set of four bulletins devoted to the various topics

Topie		Berke- ley		Des Moines	Frea-	St. Paul		Spo- kane		San Diego		Min- neapo- lis
Administrative												
announcements	13	13	48	66	59	38	49	24	14	10	*4	12
Professional organizations.		5		13	4	4	1	7	9	4	10	6
Department notices	12	18	11		9	45	17	40				- 2
Community notices Professional courses and	30			6		12	7		16	5	15	7
conferences		11			11			1	9	16	12	14
Superintendent's message.			27		4				14	21	2	1
Observances		8				1	. 1	1		6	6	
programs		10		2				1	8		2	
Pupil contests	20						4		4	3		2
Quotations Reviews of books and			2		13		3	15				
articles Educational radio							5			27	7	1
programs		31					1		6	6		
Committee meetings	2		12	13								
Professional books		3					6		3			
PT. A. and Dads' Clubs.								11	2			
Research							5					9
Educational addresses										2	11	
News—administrative											17	32
News of schools and pupils												12
Masthead									14			2
Calendar	23								-		14	

rections for the routine management of the schools and items of general interest to members of the staff.

In an effort to determine the prevailing practice regarding the superintendent's weekly bulletin, I addressed a request to superintendents of schools in the larger cities asking if they issued a bulletin and asking to be placed on the mailing list.

Superintendents' bulletins were received from eleven cities, and four issues each of twelve weekly bulletins, including Berkeley, were analyzed to determine the general form, size, title and contents. Detailed data on these points are given in Tables I and II.

Four of the weekly bulletins are issued in printed form, the remaining eight being mimeographed. The printed bulletins show the greatest diversity of material, the number of topics averaging eleven as compared with an average of seven for mimeographed issues. Two of the printed bulletins carry news items, which are seldom found in the mimeographed issues.

Each of the bulletins examined carried administrative announcements, in some cases in the form of a calendar of coming events. The percentage of space devoted to these announcements ranged from 10 per cent to 66 per cent, with six of the cities devoting approximately one-fourth or more of the space to such announcements exclusive of the calendar.

Second in order of frequency was material relating to professional organizations and the topic "Department Notices," and announcements relating to community organizations ranked third. Seven of the bulletins carried material relating to professional courses and conferences, and six, or half, contained a personal message from the superintendent, and notices of various observances.

Pupil contests of various kinds and educational lectures and programs were mentioned by five of the bulletins, and four publications gave space to educational quotations, reviews of educational books and articles and educational radio programs.

Billions Needed for Buildings

By WALTER N. POLAKOV

HERE is quite a divergence of opinion as to whether the government should be in business or should subsidize business, but one never hears that the government should foster illiteracy. As a matter of fact the public education from the three R's up is one of the most cherished of our institutions and when we hear even of fractions of 1 per cent of illiteracy among our farm population in Michigan, Wisconsin or Minnesota, we feel that our civic pride is pricked and we want to do something. When we notice that in South Carolina, Louisiana and New Mexico the percentage of illiteracy in the rural farm population varies between 7.8 and 6.1 per cent we forthwith search for an excuse, suspecting that it is the Mexican and Negro population that neglects the three R's, although as a matter of fact, it is the native whites who constitute 56 per cent of these underprivileged.

Government Aids Business

The government is definitely in the business not only of providing public education but in subsidizing thereby some of our mighty industries. Where would be our pulp and paper industry if a large proportion of citizenry could not write? What would our newspaper, magazine and book publishing business do? How could merchants advertise their wares? Moreover, the building industry and the manufacture of school furniture and supplies are definitely benefited by the fact that the government is in the business of teaching children.

As a matter of fact, during the period from 1920-1934, six per cent of our national total construction activities were devoted to the building of schools and only about twice as much to all the nonresidential construction work. The peak was

reached in 1923 when nearly \$400,-000,000 was spent on building new schools and another goodly sum was spent on alterations and repairs of the existing schools. During the depression when business and residential building was greatly curtailed, the expenditures for school building gained in proportion and represented more than 18 per cent of the cost of other building activities. But, while the relative importance in school building was increased, in absolute figures the low ebb was reached in 1930 when less than \$91,000,000 was spent on schoolhouse construc-

By 1932 the census shows that the nation possessed 245,941 school buildings of which 143,445 were one-room ungraded schools. Figured out differently, it indicates that among all the rural schools the little red houses represent 63.3 per cent. There might be some debate on whether consolidated schools are better than one-room schools from the point of

"After we have filled up the hole in public school construction to the tune of nearly \$5,000,000,000, we must be prepared to make a basic annual outlay of not less than \$330,000,000 to continue to maintain the existing plant and to make improvements," states Walter N. Polakov, an industrial diagnostician.

view of fostering community life and whether it is advisable to have the children from a wide territory congregate. Some may think it best to have children from five to seventeen years of age sit in one room around an old-fashioned wood stove playing pranks on the teacher who attempts to meet the educational need of this wide variety of ages and intelligence.

Deficiencies in Construction

School consolidation is clearly contingent upon the condition of the roads. If no school bus can bring in children from the districts in all kinds of weather, the start must be made by improving country dirt roads.

Irrespective of what kind of school accommodation is to be provided, we cannot close our eyes to the fact that since 1911 the increase in children of school age has been proceeding at a swifter pace than school construction. By 1935, we awoke to the amazing fact that our deficiencies in public schools had grown.

Expressed in dollars, this accumulated deficiency is equivalent to \$1,-071,000,000 which we failed to spend on school building between 1911 and 1934. Stated in terms of children not provided or inadequately provided with school facilities, it has been reliably estimated that 2,740,-535 children have no school provided for them and about 2,750,000 children have to be satisfied with parttime schools or classes conducted in temporary and mostly unfit quarters.

To meet the requirements of the first group, allowing roughly \$500 of school building per pupil, it will require \$1,340,000,000 to provide the schools that are needed and lacking.

Another \$1,373,000,000 will be required to anneliorate the disgraceful

condition of part-time and temporarily housed teaching. The substitution for inadequate schools and the consolidation of schools wherever practicable, according to incomplete reports and surveys of the Office of Education, would seem to require more than \$2,000,000,000 more. A total of nearly \$5,000,000,000 is needed merely to catch up and to cover the deficiency that we have allowed to accumulate in the years of prosperity as well as in the years of the depression.

To be more specific, to meet this shortage of school plant, almost 4.4 billion dollars should be spent on schoolhouse construction, nearly one-third billion dollars for equipment and about one-fifth billion dollars to acquire the necessary land.

To get out of the hole is one thing, but to keep on going after we crawl out is another. In addition to remedying the deficiencies discussed above, it is obviously necessary to continue to maintain the existing plant and to keep up with the growth of the school age population. Likewise, it would not be entirely reasonable to rule out of schools such new, sanitary and conventional improvements as are gradually permeating our homes and other public buildings.

Such items as improved illumination and ventilation, to say nothing of the needs for better toilet and washroom facilities, must be developed in keeping with the improving cultural level of the country. The average annual expenditure for such purposes is conservatively estimated as 5 per cent of the value of the present plant.

But what is the present school plant worth as it stands? According to the Biennial Survey of Education of 1930-1932, the value of public elementary and secondary schools was 6.6 billion dollars, and, if our 5 per cent is to meet the requirement of current expenditures, we must be prepared to make a basic annual outlay of not less than \$330,000,000 after we have filled up the hole in public school construction to the tune of nearly five billion.

ROHN TROSS

Local Publicity for the "Ten Issues"

By CHARLES W. McLANE

D.R. GLENN FRANK says that the future of America is in the hands of two men, the investigator and the interpreter; that the investigator advances knowledge but the interpreter advances progress. This seems to be especially true of secondary education.

Interpreting his school is recognized as a duty of the school administrator. Unless this interpretive function is exercised, educational research can bear little fruit, because administrators are chosen and must conduct the schools in accordance with policies fixed by a lay board chosen by a lay electorate.

Ten issues in secondary education studied at the St. Louis meeting of the Department of Secondary School Principals are generally known to those engaged in secondary administration, but understanding of them is neither adequate nor universal among school people, not to mention the lay public that really controls the school.

Dr. T. H. Briggs, in introducing the report of the Committee on Orientation of Secondary Education, issued a challenge that the Elvins schools have tried to meet: "Those who are truly leaders will courage-ously accept the challenge to clarify their own thinking and to fortify their own convictions . . . they will popularize these fundamentals with others both within and without the profession, so that the number of potential leaders may be increased."

Following the St. Louis meeting the school paper and the Lead Belt News, the largest local newspaper in Elvins, Mo., carried ten weekly articles titled "Meeting the Issues." They were designed to "discuss each of the ten issues with a view of making clear the kind of educational philosophy being practiced in the more progressive high schools of the nation and to determine how the

Junior and Senior High Schools measure up to these standards." (The quotation is from the first article.)

Written primarily for lay publicity, the articles are probably trite and provincial from the standpoint of professional literature, but we believe them worth while. Through a program of public relations, of which these articles were a recent phase, a better understanding and support of the school are being achieved. The commencement activities further promoted this program by developing the topic "Safeguarding Our Investment." The discussion of the issues prepared the way for a better understanding of this theme, and the program served more firmly to fix these ideas in the public mind.

School men must meet this issue of acquainting the public with the problems and means of reaching the desirable improvements necessary for a modern program of secondary education. It is a duty and one great means of making possible the conversion of research into progress.

Best Prep School Studies

What high school studies form the most effective preparation for college work? A poll of 132 members of the Hunter College faculty on this question showed the majority agreeing on the basic importance of nine subjects: English (by unanimous vote), French and German (tied for second place), ancient history, English literature, American history, modern history and elementary algebra (tied), and physics.

Although Latin failed of majority approval as a prerequisite, it had strong minority support, with 46 per cent of the faculty still favoring its study for three or four years, and only 14 per cent believing that it should be definitely discouraged.

Engineers Are Not Miracle Men

Planning Consultant's Plea to Schoolmen

By EARL HANSON

REMARKABLE interest in regional and national planning has developed in this country in the past few years. With the cooperation of what is now the National Resources Committee, fortysix states have set up individual planning boards, and in two regions—New England and the Pacific Northwest—states have banded together for action on interstate problems.

A tremendous amount of information has been gathered by these organizations and many plans have been made. Some of the plans have been applicable immediately; some have been applicable only in the near or distant future; some have been thrown or will be thrown into the ash can.

The word "planning" has been subjected to many attacks from those who compare it with regimentation. That is utter nonsense and comes from an old human weakness for letting the sound of a word conjure up ghosts. We must have the courage to ignore ghosts and deal with realities. Planning, in your work and mine, is nothing but the effort to take stock of our troubles and problems, to the end of developing cures and solutions. We live in troubled times and no sane man lets himself be frightened from the reality of his troubles by the mere sinister sound of a word.

Professional Pompousness

The same human weakness—too much attention to mere words—often leads to bad planning. The mere worship of the word sometimes affects us like a disease. It leads to professional pompousness, to profundity at the expense of clarity, to the complicated jugglery of statistics in the fatuous belief that such jugglery will bring understanding.

I have worked on the problem of planning for well over two years, first as research technician for the Mississippi Valley Committee, then for the National Resources Committee, and lately as planning consultant on loan by the National Resources Committee to Puerto Rico. I have been through all the headaches of the work, the blind alleys, periods of bewilderment bordering on despair alternating with very brief periods of intense satisfaction over some little bit of insight that may have been gained.

A Need Almost Desperate

During all that time I have nourished the growing conviction that there is an almost desperate need for close cooperation between the planners and the educators. The need for that cooperation becomes apparent as soon as we compare aims. In national, state and regional planning we may seem to deal largely with erosion and pollution, with floods, forests, parks and mineral resources. But we need continually to take stock of what we are doing.

What are we planning for? For rivers or trees or acre-feet of water, for power plants or river steamers? We are not. We are planning for human beings, for the creation of higher standards of living, for better adaptation to environment. You are planning for exactly the same things. You may deal through school plant and curriculums, but they are only tools in your hands for the accomplishment of larger human and social aims.

The men who do our regional, state and national planning work in

a democracy. They can propose to their hearts' content, but they cannot carry out except through the will of the people. The success of our planning depends on the extent to which we can make ourselves clear to those whom our plans affect. For that we need the help of you educators.

I hope we don't need you as interpreters, because any planner, any scientist, who can't explain his ideas to the first man he meets on the street is befuddled and ought to explain them to himself first. We need you because you have the plant, the equipment, the technique, for making clear to people the things they need to know in order to adapt themselves to their own changing worlds. You have in your hands the machinery not only for teaching the tricks of trades and professions but also for implanting points of view and philosophies - and unless you do both you will be defeated as surely as shall we.

How Schoolmen Can Help

A cursory examination of the report on state planning recently published by the National Resources Committee reveals at least fifteen state planning boards that pay detailed attention to education in one form or another.

My plea in this article is for a type of cooperation that reaches far beyond mere questions of school plant, taxation for education and the techniques of educational work. My plea is for education toward a philosophy that will transcend all the techniques and trades and professions. Out of an endless multitude of possible examples I want to pick a few that will illustrate the point.

The Northern Great Plains country just passed through the most devastating drought in its history. Hundreds of farmers were ruined, thousands of acres of land were laid waste, towns ran out of water. Here was a serious problem for the planners to deal with and it came to us in Washington because the people concerned thought they could obtain permanent relief through a federal engineering project.

Distress in the North Country

In their distress they turned their attention to the so-called Missouri River Diversion project. They wanted the federal government to divert the surplus waters of the Missouri River eastward into Devil's Lake and into the James and Cheyenne rivers. They thought that if that were done all their troubles would be over, their towns would have enough water, the groundwater level would be raised over an enormous area, rainfall would increase, the danger of future droughts would be eliminated.

The situation was doubly tragic because the fervent hopes that many thousands of American farmers pinned on one potential, but technically futile engineering project only blinded them to their real problems. Washington's refusal to build the project made many thousands of them suspect political opposition and made them therefore redouble their efforts along the wrong lines.

It was all very well for the federal government to turn down the Missouri River Diversion because it could not possibly accomplish 1 per cent of what its sponsors thought it would. But that did not solve the problem, did not eliminate the danger of future recurrence of drought and all its concurrent suffering. It was relatively simple to determine academically what ought to be done in the Northern Great Plains. A few of those things are being done. But many have not been done and will not be done unless the educators do

the far more difficult work of paving the way.

To me, education does not mean a complicated system of school buildings and curriculums. It means telling people something. All the rest, while important, is pure technique.

The Farmers Must Be Told

The farmers in the Northern Great Plains need to be told from childhood up that in their country drought is not an accidental matter, but is recurrent and normal to the climate. They have to be told that if a social system is built up in disregard of that disagreeable fact, the social system is in for disagreeable and dangerous times. The educators can show them that the solution to the drought problem is not found in a combination of engineering with magic, but in a land-use system and a credit system that are keyed to that region and its climate.

Those farmers need financial credit to tide them over from one rainy year to the next, provided of course that profits from the rainyyear crop can stretch that far. They need to realize from childhood on that the only use of land that is relatively safe is one that is keyed to the worst conditions in the climatic cycle, not to the best. Much of the land in the Northern Great Plains should never have been plowed and devoted to the gamble in wheat. It should have been kept in ranching. Too often in American history have we seen the terrible picture of thousands of fine, strong, hopeful pioneers flocking into splendid country during a season of adequate rainfall, only to be left stranded later with their hopes shattered and their investments aggregating millions of dollars, dissipated by a Nature that was thought to be capricious but was in reality methodical.

I am an engineer by profession, but I beg you educators to combat the queer and dangerous conception of engineers as miracle men. Forty years ago they had a drought in Eastern Nebraska and built irrigation works because their crops were burning up. No sooner were those works
completed than the rainfall increased.
The irrigation system was allowed to
fall into ruin at a loss of many thousands of dollars because no sane
farmer would pay for water when he
got it from Heaven for nothing.

During the recent drought heavy pressure was brought to bear on Washington to rebuild the irrigation system at federal expense. Judging from recent weather reports that system, if built, would have been doomed to failure in the current year. But Washington's refusal to construct the desired project did not in the least remedy the conditions that drove those farmers to demanding engineering projects.

But before you can design your buildings properly, you must know what you want to teach in them.

I plead for the teaching of a philosophy that will overcome our dangerous habit of taking refuge in numerology. We worship numbers. The facile correlation of numbers with human well-being is a national vice.

Dangerous Arguments

A certain state has for years been clamoring for a certain navigation project. The project is being constructed but the arguments for it are dangerous. Recently I heard a former governor of the state plead with his listeners as follows: "Our state has a population of only fifteen per square mile. Parts of the East have 250. If we get our navigation project, we too can have 250."

Neither the logic of that conclusion nor the desirability of the implied results is clear. Had the inhabitants of that state been educated to a realistic conception of their own problems, they would think of crowded slums and a number of almost hopelessly stranded populations in the East and be tempted to rise in revolt against the navigation project. Fortunately for everybody concerned, there is no chance in the world of a few river steamers bringing the results claimed for them.

The attention of at least three state

planning boards, of the National Resources Committee and a number of other federal agencies has long been given to the Ozark Highlands. As an academic exercise, the development of a plan for this region is not only comparatively easy, but a lot of fun as well. A coordinated program of erosion control, social betterment, wild-life conservation, promotion of recreational facilities, power generation, forestation and flood reduction is not only desirable there, but in many senses necessary.

But what will individuals and special interests say when their own immediate desires conflict with the common good? What will the hill-billies say when the plan affects their lives? What will the owners of forest lands say? What will towns say when their immediate pet projects are turned down in favor of some larger well-integrated plan? I have been through that type of excited clamoring so often that I long for a vacation on a quiet mountain-top.

In the Ozarks as well as everywhere else, we planners need the help of you educators in giving people realistic conceptions of the real nature of their problems and in convincing them that the ghosts conjured up through their own imaginations are far more dangerous to the individual and common good than are the concrete problems themselves.

Education, too, must not be a word to be worshipped in the vain hope that it will accomplish miracles without being aimed at definite goals. It must deal with far more than the dozens of abstractions implied by the three R's. It must deal with the lives of people, with their immediate and general problems, and must help those people to adapt themselves to a world that changes with bewildering rapidity.

Insofar as planners uncover, define and face human problems, they can be of inestimable value to the educators. Insofar as educators will lead their pupils to realize and face these problems, they can overcome the terrifying sound of mere words and can make regional and national

planning in our democracy successful to an extent hitherto undreamed of.

Our present national interest in planning will be defeated if we merely worship the word. We must realize that that interest could never have been aroused if existing troubles, problems and human suffering had not made intelligent planning necessary. We must also realize that education is largely futile if it does not pay fearless attention to existing problems and the conditions that cause human suffering. The conclusion is inescapable that the planning organizations and the educational organizations must work hand in hand toward a common goal.

Club Is Character Training Laboratory

By N. L. GEORGE

AN EXCELLENT laboratory of character training for boys and girls came into existence about five years ago in the Robert E. Lee Grade School at Duncan, Okla. The germ of the plan was a sixth grade English Club. Gradually this club took over the management of the room.

The following year, the fifth grade joined the club and the larger unit assumed added responsibilities. A task of the larger unit was the direction of pupils in entering and leaving the building. The third year all the pupils of the third, fourth, fifth and sixth grades became members. Vicarious participation in the club is enjoyed by the pupils of first and second grades, who are under the supervision of the club officers on the playground and on the way to and from the school. Each room of the first two grades has a separate organization.

Officers are elected every six weeks, which makes it possible for about 15 per cent of the 400 pupils to hold office, either elective or appointive, each year.

As the club grows in size and effectiveness, new responsibilities are assumed. A corps of officers directed by the Chief-of-Hall regulates traffic within the building; a corps under the Chief-of-Grounds supervises the playground; a corps under the vice president investigates absentees in order to reduce the number of avoidable absences, and still another, the

Chief-of-Sales has charge of the school store. All belted officers supervise the pupils on their way to and from school in order to avoid accidents.

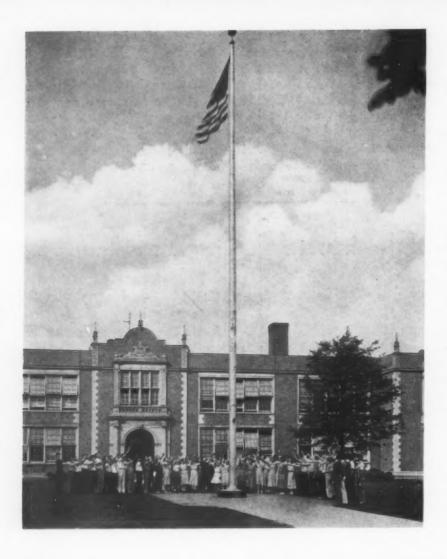
Sam Browne belts of West Point webbing, fitted with brass slides and buckles, give the officers visible rank. The six highest officers wear these belts. These belts and aiguillettes were recently purchased for the Citizenship Club by the Duncan Kiwanis Club.

"Be Courteous" is the motto of the club. A person soon realizes that this ideal is reached as he sees the children actually demonstrate respect to their officers and the reciprocation of the officers.

The teachers are constantly alert to help the boys and girls solve their little civic problems. They are carefully guiding the boys and girls in their own government, although the teacher is naturally and rightfully in ultimate control.

This Citizenship Club is truly a laboratory of character training. Such traits of character as fair play, respect for the rights of others, cooperation, proper reception of criticism, fidelity to promises made, sense of duty and respect for constituted authority are fostered by the club.

The general idea of this usable plan of citizenship training was originated by Bert Lindsey, the principal of the Robert E. Lee School. He and his staff work diligently with it.



Each of three Jamestown schools demonstrates one point in the character education code described by Superintendent Persell. At the left: "Rule 4-The good citizen of Washington Junior High School is loyal to the best." The pupils are pledging allegiance to the flag. Below: "Rule 3—The good citizen of Newland Avenue School is considerate of others." The schoolboy patrol is directing traffic. Opposite: "Rule I-The good citizen of Fairmount School respects himself." Morning inspection of hands and teeth takes place in the first grade.





Experiment in Character Training

By GEORGE A. PERSELL

AN character be taught, or is it one of those elusive things that defies the efforts of instructors? Perhaps no question is more baffling to school executives at the present time.

In the fall of 1931 a committee of principals and teachers in Jamestown, N. Y., was appointed to write a syllabus of character education for the schools of the city. It had long been felt that while character education was taking place in the schools, no definite plan was being followed, each teacher being left largely to her own devices in the matter. The work

of the committee lasted the entire year and resulted in a syllabus of 116 mimeographed pages covering the grades from the kindergarten through the ninth.

Near the close of the next school year a questionnaire was submitted to the teachers to determine what use had been made of the syllabus. The result was far from reassuring. A few of the teachers had read the entire syllabus, others had read parts of it and some had not read it at all. Little use apparently had been made of the

material in teaching. Evidently something was wrong either with the material contained in the syllabus or with the length of the syllabus or with the teachers themselves. The conclusion was that the trouble lay in the length of the syllabus.

In order to solve this problem the superintendent selected a committee of seven teachers and asked them to help work out a code of ethics based on the syllabus.

The committee completed its work in December, 1933, and the code for

Suggestions for Teaching Self-Respect*

September-The Good Citizen of -School Respects Himself.

The good citizen of our school is clean in body and in mind. He takes care of his property and of his surroundings. He takes care of his health.

Kindergarten

- I. Application to the child's daily life
 - a. Clean hands and face and teeth
 - b. Tidy and attractive schoolroom c. Materials put in place when not
 - d. Proper use of handkerchief
- II. Stories
 - a. Peggy and Peter-Lena Towsley
 - b. The Wind's Fun Story Garden
 - c. Tickety Tock (Maude Lindsay
- III. Poems
 - a. My wash cloth and my towel Are hanging up, you'll see, My mother put them there For no one else but me.

This wash cloth and this towel Are hung upon a rack, And every time I wash I always hang them back.

b. Do you cough or sneeze or sniff? Do it in your handkerchief.

Grade I

- I. Application to child's daily life
 - a. I will keep my face and hands clean.
 - b. I will control my voice and my temper.
 - c. I will keep my desk in good order and the floor around it clean.
 - d. I will put my wraps and rubbers where they belong.
- - a. Pig Brother-Bryant
 - b. Dust Under the Rug-Lindsay

Grade II

- I. Application to the child's daily life
 - a. I will keep my body clean.
 - b. I will keep my desk in order.
 - c. I will help to keep my room attractive.
 - d. I will think clean thoughts.
 - e. I will try to avoid doing things that will make me sick and weak.
- II. Stories
 - a. The Fairies' New Year Gift-Emilie Poulsson

b. Toads and Diamonds-Perrault

Grade III

- I. Application to the child's daily life
 - a. Projects for improving the appearance of the schoolroom.
 - b. Health projects-"Health is better than wealth."
 - 1. Personal hygiene
 - 2. Proper diet
 - 3. Fresh air
 - 4. Sleep

II. Stories

- a. Jan's Home-Work-Play Book III
- b. The Girl Who Used Her Wits-My Book House II

Grade IV

- I. Application to the child's daily life
 - a. Projects for improving the appearance of the schoolroom.
 - b. Health Projects-"Health is better than wealth."
 - 1. Personal hygiene
 - 2. Proper diet
 - 3. Fresh air
 - 4. Healthful exercise
 - 5. Adequate rest.
 - 6. Avoiding the common cold

II. Stories

- a. Dust Under the Rug-Baldwin-Bender IV
- b. The Girl Who Used Her Wits-My Book House II

Grade V

- I. Application to the child's daily life
- a. Self-respect evidenced by attention to the small details of personal appearance—clean finger nails, well brushed clothes.
- b. Self-respect evidenced by neat looking school work-tidy test papers, arithmetic papers, etc.
- c. Self-respect evidenced by the habitual practice of good manners. III. Physical Education 1. The use of "please" and
 - "thank you" 2. Standing when a teacher or visitor speaks
 - 3. Waiting until older people are seated in home, street car or
 - 4. Boys raise hats to ladies

5. Boys allow girls precedence in entering or leaving room

II. Mottoes

- a. I can never hide myself from me; I see what others never see.
- b. A good name is rather to be chosen than great riches.
- c. Politeness costs nothing and wins everything.

Grade VI

- I. Application to the child's daily life
 - a. Self-respect evidenced by keeping physically fit.
 - 1. Personal cleanliness
 - 2. Healthful exercise
 - 3. Adequate rest
 - 4. Proper diet
 - b. Self-respect evidenced by keeping mentally and morally fit.
 - 1. Establishment of good reading habits

II. Mottoes

- a. A good name is rather to be chosen than great riches.
- b. A man of good character is respected by all.
- c. A good face is a letter of recommendation.
- d. To thine own self be true.

Junior High School

- I. Industrial Arts
 - a. Development of the idea of the dignity of manual labor, when it is well done. The self-respecting man is neither afraid nor ashamed of work.
- II. Home Economics
 - a. Self-respect evidenced by attractive and well-kept surroundings.
 - b. Self-respect evidenced by the habitual practice of good man-
 - c. Self-respect expressed through appropriate clothing and good grooming.
- - a. Personal hygiene—showers after exercise.
 - b. Good posture.
- Other Subjects
 - a. Self-respect increased by
 - 1. Master of subject matter
 - 2. Power of self-expression
 - 3. Power to interest others

^{*}Illustrative matter for developing the first topic in the character education code.

The Code

1. The good citizen of — school 6. The good citizen of — school respects himself.

He is clean in body and in mind. He takes care of his property and his surroundings. He takes care of his health.

2. The good citizen of - school respects authority.

He obeys the laws of health. He obeys the rules of home and school, and the laws of the community, state and nation.

3. The good citizen of - school is considerate of others.

He is helpful, kind, courteous, fair, tolerant, punctual and tactful. He is a good sportsman. He is never a bully or a rowdy.

4. The good citizen of - school 9. is loyal to the best.

He tries to represent and to defend all that is best in his home, his school, his city and his country. He is not a "knocker."

5. A good citizen of - school is honest.

He tells the truth in deed as well as in word. He is accurate in his work and in his speech. He takes no unfair advantages. He takes only what belongs to him.

meets hardship with courage.

He does not avoid the difficult things; he conquers them. He does what needs to be done without whining and without nervous agitation.

7. A good citizen of - school is thrifty.

He makes his possessions serve the purpose for which they were intended. He does not wantonly waste either time or property.

8. A good citizen of - school is dependable.

When he gives his word, whatever he says will be done. He neither shirks nor forgets.

The good citizen of - school is self-controlled.

He does not need to be watched for he watches himself. He masters his temper. He controls his actions. He modulates his voice. He does nothing too much.

10. The good citizen of - school is self-reliant.

> He weighs facts, makes his own decisions and then acts according to his best judgment. He is not a sheep carried along with the crowd.

the latter part of the school year was sent to the teachers at the beginning of February, 1934. Subsequent reports indicate that the code is proving helpful. It is brief, clear and suggestive. It gives definite directions yet leaves the teacher free to supplement the suggestions with any material which she feels will be helpful. The foreword of the code follows:

FOREWORD

"In September of this year, the superintendent of schools appointed a

committee to go over the syllabus on character education with a view to codifying it. At his suggestion, the committee selected from that syllabus ten traits of character that seemed to be especially stressed and these were incorporated into a simple code, in form not unlike that used by the Boy Scouts.

"This code is divided into ten parts, one for each month of the school year. While a different trait of character is presented each month, the arrangement of material is uni-

form for all months. First, there is a short slogan, followed by a brief paragraph of explanation. The former is intended primarily for the pupil; the latter for the teacher. Following this paragraph there is suggested material that may be used to illustrate the trait that is being developed. This illustrative material has been, for the most part, taken from the syllabus of character education but it has been collected from various parts of that book and arranged in what the committee hopes is a convenient and usable form.

"The method employed in using this code will, of course, vary materially in the different grades. For example, it has been suggested that the slogan itself is of doubtful value both in the kindergarten and in the high school. The effect of even the simplest of codes on the very young child would be only to increase his bewilderment; the effect of a code on the adolescent is a thing not foretold in the Prophets. But with method this committee is resolved to have nothing to do.

"It is obvious, also, that in actual practice, character education cannot be confined to the development of any one trait in any given month. This code is by no means intended to exclude other forms of character building. It is intended simply as a means of making a concerted effort to develop certain desirable traits of character by directing the attention of all the pupils of the public schools to a single, specific trait at the same time. The committee offers it only as another experiment in the field of character education."

The code, which is printed in full on this page, is offered in the hope that it may prove suggestive to teachers who are looking for help in character training.

The committee after deciding upon the ten major topics that should enter into its code elaborated each topic by offering suggestions and illustrative material to be used in the various grades. How this was done is shown on the opposite page by taking Self-Respect as an example.



Six Man Football

By F. L. SHOWACY

of the problems of the small high school. Numbers capable of participating were small and the expense of equipment was large. After an experimental trial of a year at Alexandria, Belvidere, Chester and Hardy, Neb., our schoolmen are convinced that an eminently satisfactory solution has been found in the development of six man football. It is adaptable to small schools and to small fields. Any school with ten or fifteen boys available for the game can play it.

League Is Formed

The first game was played in the fall of 1934 at Hebron, and was so successful that at the beginning of the 1935-1936 term year a group of school officials from high schools in South Central Nebraska and North-

ern Kansas met and organized the Little Blue Six Man Football League. It is made up of the high schools at Alexandria, Chester and Belvidere, Neb.; Mahaska, Kan., and Hebron Academy, Hebron, Neb. These schools have high school enrollments ranging from a minimum of thirty-five pupils to ninety-five or a hundred pupils.

How the Game Is Played

Six man football is played on a field 40 by 80 yards. The formation on defense is a 3-2-1; on offense a shift is used. The blocking and tackling are the same as in regulation football.

On offense the quarterback, or center, must pass the ball backward at least three yards before it can be advanced. Thus the game is more open than the eleven man type, with The six man high school football team of Alexandria, Neb., is a member of the newly organized Little Blue Six Man Football League.

less piling as a result. Injuries are not common. Among the boys playing last fall only a few minor bruises occurred such as would result from any competitive game.

The teams play in regular football equipment except that some teams cut down on expenses by playing in basketball instead of football shoes. The cost of equipping a team is not prohibitive for the small school.

The game has all the thrills of regular football—end runs, line bucks, center smashes, reverse and spinner plays, and forward and lateral passes. The crowd roots its approval at the completion of a forward pass or the making of a good tackle just as it does in regulation football. The smaller field and the backward pass of three yards are the only differences between the six man and eleven man games.

The success of the game must be judged by at least three sets of judges: those in charge of the game, the players and the spectators. Those handling the game are convinced that it is an excellent autumn game for the small high school. The players are enthusiastic since it gives them an outlet for their football interest. The spectators are manifesting their approval by coming out to the games in ever increasing numbers. It satisfies even the most rabid football fan.

In summing up the merits of the game I feel that it has solved in a gratifying way our problem of sports for the months of October and November and at the same time it meets with enthusiastic public approval.

Making Friends for the School

What an English Teacher Can Do

By LELAND B. JACOBS

UTHORITIES in the field of social interpretation have come to realize that one of the most effective agents in the promotion of a sound and sensible policy of public relations is the classroom By working successfully with children the teacher creates in the home an interest in and good will toward the school and its program. The average American parent's estimate of the effectiveness of the educative process in his community is based upon his child's reactions to the school environment. That children are happy in their school contacts, that they are growing intellectually and socially and that they exhibit an interest in the school's activities seem to be the parents' chief concerns in their relations with the school. Bulletins, meetings, talks, lectures, exhibits and all such other stunts or devices fade from importance when compared thoughtfully with the genuinely wholesome homeschool relationships established by the teacher's good work in the classroom. Progressive administrators recognize the intrinsic values in the development and maintenance of a program of social interpretation that is built upon a solid foundation.

Contacts With the Home

In the progressive high school of today no classroom teacher has a greater opportunity for satisfactorily influencing the homes of the community than has the English teacher, in whose hands are the tools for developing proficiency in the use of the mother tongue. Business man, academician and artist during working day or leisure hours are dependent in large measure upon an effective use of the language arts and skills. Because this is true the English teacher occupies a position that offers broad

opportunities for making contacts with the home. As such an agent the English teacher who is alert to the larger service of his position will see many legitimate occasions for forwarding the best interests of the local school system and of education in general.

Such classroom opportunities are far too many and varied to mention here. Some examples may serve to indicate the potentialities.

Through Composition Activities

1. The English teacher can aid in the creation of right home attitudes through guidance and aid to children, as adviser and friend.

One junior high school English teacher always begins the work of the incoming seventh grade with a unit of work generally titled "Beginning My Work in Junior High School." In this unit a real effort is made to aid the children through reading, conversation, discussion and oral and written composition in meeting the adjustments and challenges in their new surroundings. English activities center in the reading of books and short stories related to school life, in discussing problems and topics relating to the spirit of the school, the newcomer's contribution to the school, the making of new friends and habits of independent study. Thus the English teacher becomes the guide, adviser and friend of children at a time when they are making difficult adjustments.

The composition activities related to the unit carry definitely into the home. Topics such as "How Schools Have Changed Since Mother's School Days" and "Why Dad Wants Me in School" bring to the attention of the home some fundamental changes in the educational evaluationary process and give parents a chance definitely to contribute in a little used but valuable way to the work of the classroom.

2. The English teacher can aid in focusing the attention of the home on school activities through challenging problems and projects.

A skillful English teacher in senior high school has achieved fine relationships with the homes of her pupils through a series of units of work relating to debatable topics such as "Shall I Go to College?" "What Occupations Are Open for Me?" "How Can Our School Serve More Widely?" It is known definitely that many homes of this community have become favorably interested in school issues and problems through such discussions. The last mentioned problem upon several occasions has proved an invaluable ice-breaker for progressive innovations in school practices and expansion. What effect these discussions may have upon the formulation of right attitudes toward the school in the minds of the future citizens who have participated in the discussions can only be guessed at.

Suggesting Reading for Home

3. The English teacher can help in supplying the home with worthy leisure-time activities.

Only the classroom teacher knows the frequency with which the home is served in this respect: "Dad liked the book I was just reading," "I was telling Mother about those poems we read yesterday, and she asked if I might bring them home so that she might read them." Sometimes it is "Could I take that story to read to my younger brother?" or "What book would make a good gift for my boy friend?" or "Dad wonders if you know another good book about the World War?"

Novel, essay, poem from magazine and book find their way into reading and nonreading homes through the effective teaching of English. It would seem that this practice could not fail to establish an effective bond between home and school, and as such is good practice.

The English teacher also has many opportunities to serve as an agent in social interpretation through extracurricular activities—those activities through which parents are kept in pleasant contact with the life of the school and by which good will is maintained through legitimate emotional appeals. Plays, pageants, special day programs and verse speaking choirs are all within the English teacher's field of service and are types of activities that draw to the school groups with otherwise widely diversified interests.

Programs and Pageants

Recently one high school inaugurated a plan for annual outdoor pageants which drew to the school large numbers of parents and patrons to witness artistically conceived and well-balanced productions of literary masterpieces, which in their interpretations had been integrated with the various departments of the whole school. The social and emotional values of the patrons' pride in such annual events cannot be statistically measured, but one would be blind if he could not see at least some of the wholesome relations which developed in touching so many of the homes in the community.

Christmas programs, assembly programs, commencement activities and the more recent verse speaking choirs, debates, oratory or other speaking contests—which are so often at least in part the English teacher's responsibility—are other potential assets in public relations. Nor does one for-

get the school newspaper, the yearbook or magazine which goes into the home and which rarely appears without some guidance at least from the hand of the English teacher.

In many communities also this department is called upon to serve in the capacity of critic and adviser. Groups wish to give one-act plays; individuals want book recommendations; church societies would like information concerning the location of good program materials for special days; clubs want books reviewed, ad infinitum. Unobtrusively, the cause of education is thus served.

It has not been the purpose of these observations unduly to extol the teacher of English, but rather to point out suggestive programs in which the alert English teacher can serve the children, the community and the educational system by helping to balanced home relationships, without which no portion of the American public school system can survive.

What the English teacher can do can be duplicated with other similar activities in every other field of subject matter. If each teacher will search out the possible ways in which his department can serve the larger school community there will certainly be less talk of curtailing school budgets and of eliminating the "fads and frills" of education.

The key to the secret garden of the public's mind, pulse and heart is not buried at all: it is just a case of too many workers in the public school walking past with a view so circumscribed that they fail to see and make use of the self-evident opportunities for wholesome community contacts that lie always within their grasp.

Out to Improve Education for American Democracy



HERE'S the 1937 Yearbook Commission snugly buttoned up in overcoats: (Front Row) Harry Elmer Barnes; Clyde R. Miller; Frank G. Pickell, chairman; Josephine Sullivan, reporter; Frederick H. Bair, and S. D. Shankland, N. E. A. Office. (Back Row) J. A.

True; Hollis L. Caswell; Willard S. Elsbree; H. Claude Hardy; John Guy Fowlkes, and Frank W. Hubbard. They posed for this photograph at Skytop, Pa., in early April. Charles A. Bowers and Arthur B. Moehlman were not present at this session.

Our Developing School Law

By M. M. CHAMBERS

HE recent publication of the Fourth Yearbook of School Law¹ enables one to gain readily an impression of the volume of school controversy that has reached the higher courts in each of the states during the last four years. The total number of cases digested in the four Yearbooks is more than 1,000. It should be understood that this includes only those which were adjudicated by the courts of last resort or the intermediate appellate courts in the several states. The number of school cases decided in the lower courts is unknown, but it is of relatively lesser concern, because the chief measure of the importance of school litigation is the number of cases that reach the higher courts where the recorded decisions are of great persuasive authority in determining future development of the law.

In discussing the distribution of these cases throughout the United States during the last four years, we shall use round numbers and purposely avoid statistical precision. The application of overrefined statistical techniques to data of this type is of questionable utility. Except for limited purposes, it is absurd to treat judicial decisions as though each were a mathematical unit of equal weight. A single case may and often does involve the adjudication of several wholly distinct points of law, and even these are not susceptible of being treated as invariable units.

In this field, thoughtful analysis of

the principles involved is a more fruitful technique of research than any other but is at present largely neglected even in graduate departments of education. Acquaintance with the constant development of school law by court decisions is essential to the full equipment of teachers and school administrators, and this fact cannot long be ignored by the profession of education. The fore-

New England has few school lawsuits. The South has many. Is it because one section is peaceable and the other quarrelsome, or is it because there is little recent progressive legislation in one region and much in the other?

going allusion to the futility of mere statistical manipulation of such data is not meant to inveigh against much more extensive and careful study of school law by appropriate methods. There is great need for hundreds of well conceived investigations in school law by competent and experienced graduate students in education.

It appears that Texas, with approximately 90 decisions, leads all other states in the amount of school litigation during the last four years. Kentucky is a close second with some 75 cases, and Oklahoma and California follow with about 50 each. These four states account for one-fourth of the total volume of cases. The curious reader will wish to know

why this is true. Partially satisfactory answers can be readily given.

The volume of school litigation in a given state usually shows an increase during the years immediately following extensive revision of the school laws by the legislature. It will be recalled that Texas gave its school statutes an extensive overhauling in 1929, Arkansas initiated several changes in 1929 and 1931, and that Kentucky adopted a new school code in 1934. In these states much of the new legislation was designed to facilitate the consolidation of rural schools and precipitated a considerable amount of litigation regarding changes in the boundaries of school districts. In Oklahoma there have been numerous controversies in recent years regarding the definition of the respective spheres of the local school authorities and the county fiscal authorities, occasioned by the ambiguous character of a provision of the state constitution, and extended delay on the part of the legislature in amplifying and clarifying the law on local governmental subdivisions.

In California a substantial part of the recent litigation has consisted of cases involving interpretations of the teachers' tenure law. In common with other new types of legislation, teachers' tenure laws seem to require a period of experimental amendment and judicial construction before they eventually settle down into a form capable of easy routine administration. Another substantial number of California cases have concerned the tort liability of school districts. This is due to the fact that California has no less than three recent statutes modifying the ancient common law rule of the nonliability of school districts, and permitting them to be held responsible for the negligence of their

¹Edited and published by M. M. Chambers, 744 Jackson Place, Washington, D. C. Pp. 154. \$1 postpaid. The Fourth Yearbook is published with the assistance of a five-year grant (1936-1941) by Carnegie Corporation of New York, through the Carnegie Foundation for the Advancement of Teaching, to Purdue University, for studies in school law. No pecuniary compensation or profit accrues to any individual from the enterprise. The several chapters of the Yearbook are contributed by fifteen authors in universities and public school systems in various parts of the country.

officers or employees under different specified circumstances.

Which states have the smallest numbers of litigated school controversies? It appears that no school cases have reached the higher courts of New Hampshire and Vermont during the last four years. Not more than five such cases are reported respectively in Rhode Island, Maine, Connecticut, Delaware, Virginia, Nevada, Wyoming and Arizona. It will be observed that this group of states includes several of those ranking among the lowest in population, and that with the exception of Virginia and Connecticut, none has as many as a million people. This helps to account for the paucity of controversies, but geographic factors, to be noticed later, also enter into the pic-

Considering all forty-eight states, the median number of cases during the last four years is approximately eighteen. Deviations from the median do not invariably go according to population. The four most populous states, New York, Pennsylvania, Illinois and Ohio, are all relatively close to the median number of cases, and Ohio, with only eighteen cases, is far below Montana, one of the least populous states, with a total of twenty-seven cases.

Sectional Distribution

The South as a section has a heavy preponderance of the school litigation despite the fact that a few Southern states, notably Virginia, Tennessee and South Carolina, have had but few cases. It is interesting to note that one-fourth of all the cases in all the states have arisen in four states which form a contiguous but irregular territorial bloc in the South and Southwest-Kentucky, Arkansas, Oklahoma and Texas. Nearly all of the remaining states of the South have equaled or exceeded the median number of cases, though some of them are below the median in population.

New England as a section has conspicuously the smallest amount of litigation. Even Massachusetts, a populous state, has recorded only fourteen cases. No other New England state reports more than five.

School cases may for the most part be classified under three major headings: (1) those relating to personnel, (2) those concerned with the units of school administration and (3) those involving school finance and business routine. The numbers of cases recently arising in these three areas have been roughly equal, with the last two slightly in the lead, no doubt because of the economic perplexities of the present time.

Topical Distribution

Personnel cases may involve the rights and liabilities of parents and pupils, teachers and supervisory personnel, and local, county and state school officers. The most frequently litigated subjects in this large group are the transportation of pupils and the tuition of nonresidents, teachers' contracts and pay, interpretations of tenure and retirement laws, and the financial responsibility of district treasurers and their sureties. Other current issues of present interest are the frequent attempts to dispense with the services of married women teachers and efforts to curb nepotism in the employment of teachers.

In matters concerning the units of school administration, more than half of all the cases are concerned with the local district or primary unit, and a heavy proportion of these involve the creation and alteration of districts, incidental to the trend toward larger units. The school finance and business management group includes cases relating to the acquisition and use of school property, the liability of the school unit in damage suits, its rights and duties in the making and enforcement of contracts of purchase, the issuance of bonds and other evidences of indebtedness and the levying of school taxes. These last two subjects account for a great deal more than half of the recent cases in the finance group, as might be expected in view of the economic situa-

Laymen and school people having little acquaintance with the progress

of the law and with the social function of the courts sometimes lump all law suits into one category which is labeled as merely evidence of costly and regrettable controversy that should and could be largely avoided. It is true that a certain amount of litigation is due merely to ignorant contentiousness, but a lawsuit is by no means always an event to be deplored and deprecated because it is often an indication of social progress and sometimes a landmark in the advancement of education.

It is quite apparent that the function of the courts in determining the shape of the changing social system is no less important than that of the legislatures. It is erroneous to suppose that legislatures alone are the sole sources of law in the American states. In fact, the product of the legislative mills is not infrequently a crude and unsatisfactory hodge-podge which can be made workable only after it has been subjected to the cold and penetrating light of judicial interpretation.

Significance of Litigation

It seems superfluous to say that in America the judge-made law is as important as the statutes, because the courts not only interpret the meaning of statutes but also on occasion invalidate them in their entirety when their provisions are adjudged to be incompatible with either the federal or state constitutions. Moreover, a large part of the work of the courts consists of adjudicating points of law not covered in the statutes. In such cases the only recourse is to the common law which Anglo-Saxon courts have been building and modifying for centuries. No court wishes to follow ancient precedents blindly. Most judges are willing to employ their discretion in making progressive adaptations of outworn rules when current social needs are competently shown to require them.

Much progress in educational organization and administration can result if educators will study school law and form a reasonable rapprochement with the work of the bench and bar.

How Many High School Pupils in 1940?

By A. C. ROSANDER

HE continued unemployment of millions of adults will lessen decidedly the chances of youth to obtain jobs in stores, factories, mines and other places of work. When jobs are plentiful, young men from fifteen to eighteen years of age can often obtain good jobs with pay equal to that which a man receives, but when unemployment is widespread the most that they can find is some blindalley work which usually pays little more than a mere pittance. This means among other things that it is going to be increasingly difficult for the strong and ambitious young fellow to work and save enough money to put himself through school.

It seems probable that sooner or later every youngster will go to high school because it will be the only activity open to him. Certainly that is the situation now with millions of young people who are continuing their attendance at high school or college because there is nothing else to do. Where economic conditions will finally leave the youth of this nation no one knows. Certainly the power machine has been just as effective in eliminating youth from factories and mines and farms as it has been in eliminating adults from employment in these fields.

Possible Checks on Enrollment

At present there appear to be two possible factors that might check the present trend of enrollment in public high schools. These are: (1) the provisions for youth in CCC camps and other similar governmental undertakings, and (2) improvement in the economic situation. If the CCC remains a permanent institution and expands its educational program, we may have two paths of high school

education: the local school and the federal school. On the other hand, if the economic situation improves sufficiently, many youth of seventeen and eighteen years will leave school for industry unless laws and public opinion prevent it.

What is the possibility that these factors will upset the present trend? No one knows with any great certainty. At the present moment, neither one of these factors appears to be strong.

Predicting on Basis of Last Five Years

Suppose that we assume therefore that the present trend of public high school enrollment will be maintained, what will be the enrollment situation five years hence judged from a national point of view? We have investigated this problem and present forthwith our findings for whatever value they may have.

According to a statement made by the chief of the division of statistics of the Office of Education a value of

5,700,000 would be a conservative estimate of the number of pupils enrolled in the upper four years of the public high schools in 1935. This means an actual increase of 1,300,-000 above the 1930 figure. Now if the same number of pupils is added during the next five years the enrollment would then stand at 7,000,000. This would represent an annual average increase of 4.2 per cent. Now if this rate of increase is too high, and it may well be, then the figure of 7,000,000 will not be reached. What would be the resulting figures if we employed more conservative rates of increase?

On the basis of a rate of increase of 2 per cent each year for the next five years, we obtain a total of 6,300,000 for 1940. If we use 3 per cent instead of 2 per cent we obtain a total figure of 6,600,000. These figures represent a rather cautious estimate of high school enrollment five years hence. We have employed several other statistical methods, two of

Many will smile and ask, "What is the value of these estimates of public high school enrollment in 1940?" Doctor Rosander lists four purposes they serve: (1) they form a basis for educational planning; (2) they show the necessity for providing for growth as it comes; (3) they give some hope to the unemployed teacher, and (4) they indicate that the growing pains of the public high school are not going to subside for some time.

which were graphic and three of which were algebraic. We shall now turn to those and see what predictions we obtain from these methods.

Methods of Prediction Employed

The five methods employed are listed as follows: (1) simple graphic extrapolation; (2) logarithmic graphic extrapolation; (3) exponential curve of the form $y=ab^x$; (4) power equation of the form $y=ax^b$; (5) parabolic equation of the form $y=a+bx+cx^2$.

The basic data are given in Table I. These figures are taken from the Biennial Survey of Education, II, 1928-1930, page 5. The figure for 1932 is taken from the Statistical Summary of Education, Bull. 1933, No. 2, page 6. The data contained here apply to the upper four years of the public high school.

HIGH SCHOOLS IN THE UNITED STATES				
Year	Enrollment			
1890	202,963			
1900	519,251			
1910	915,061			
1920	2,199,389			
1930	4,399,422			
1932	5,140,021			
1935	5,662,247*			

The simplest method of predicting public school enrollment five years hence is to graph the data in Table I, extend the line until it reaches 1940, and find the ordinate corresponding to this date. One must proceed with caution in using this method or for that matter in using any of the methods to be described in this article.

But we are justified in extending a line of a graph into future time provided we are aware of the limitations involved. If the underlying conditions remain practically constant then our prediction will be highly accurate, but if conditions change then the present trend may not continue in exactly the same direction. That is why a discussion of the factors affecting school enrollment is important.

TABLE	II-DATA FOR	PLOTTING A	LOGARITHMIC	GRAPH
	OF HIGH	SCHOOL END	OLLMENT	

	Years 1880 is 0	Enrollment (Thousands)		
Year	x	y	log x	log y
1890	10	203	1.000	2.3075
1900	20	519	1.301	2.7152
1910	30	915	1.477	2.9614
1920	40	2,199	1.602	3.3422
1930	50	4,399	1.699	3.6433
1940	60	7,500	1.778	3.875*

What does one find on extending the graph of these data? Here again we take one of several courses. Our graph shows that the 1932 figure does not lie on the same straight line as the 1920-1930 trend, but is somewhat higher than one would expect from extending the latter line. Hence we made two different extensions: one in which the 1920-1930 line was extended to 1940, and the other in which we extended the 1930-1932 line to 1940. The former procedure gives us 6,600,000 whereas the latter shows a value of 8,200,000. In other words if the 1930-1932 trend is maintained we shall have over 8,000,000 youth enrolled in public high schools in 1940.

That this high value will be reached is most unlikely. Data given in the National Education Association bulletin entitled "Current Conditions in the Nation's Schools" indicate that this trend was not maintained in 1934, the high school enrollment for that year being 5,461,000. This falls below the value of 5,900,000, which one would expect if the 1930-1932 trend were maintained.

Now one might look upon the 1920-1930 trend as giving a low or

minimum prediction whereas the 1930-1932 trend gives a high or maximum prediction, and take the average of the two values. If one does this he obtains a value of 7,400,000 for 1940.

Plotting a Logarithmic Graph

In order to plot our data on a logarithmic scale we assumed the year 1880 as zero time and replaced each succeeding decade by the proper number. We also rounded off the population figures of Table I to the nearest thousand. Then we found the logarithms of both columns of numbers and plotted them on a graph. Finally we extended the upper part of this graph so that we could obtain a value for 1940. The data are given in Table II.

Now if we plot log x against log y we find that the five points do not form one straight line but two broken ones, but those for 1910, 1920 and 1930 form one straight line while those for 1890 and 1900 form the other. Ignoring these values for 1890 and 1900 and projecting the former trend into the future, we obtain a value for log y in 1940 equal to 3.875. This gives us an estimate of 7,500,000 on the basis of our y scale.

	TABLE III	—DATA FOR	THE CURV	$E Y = AB^x$	
x Years	y Enrollment (Thousands)	Ratio Successive y Values	. x2	log y	x log y
10	203		100	2.3075	23.075
20	519	2.56	400	2.7152	54.304
30	915	1.76	900	2.9614	88.842
40	2,199	2.50	1,600	3.3422	133.688
50	4,399	2.00	2,500	3.6433	182.165
Sum 150			5,500	14.9696	482.074

This curve y=ab^x is applicable whenever the y values increase in geometric ratio as the x values increase in arithmetic ratio. Since the ratio of the successive y values fulfill this condition approximately, we are justified in using this equation from a mathematical point of view. The complete data necessary for finding the constants a and b in the equation are shown in Table III. The usual least square method was employed.

Use of this method led to the following equation: $y=101.1 (1.079)^x$ where y is the school enrollment in thousands and x is time in years counting from 1880 as zero time. For 1940 x would equal 60; substituting this value for x in the foregoing equation gives us a final value for y of 9,600,000.

Now let us examine the results of predicting from the curve $y=ax^b$. Reduced to logarithmic form this equation becomes $\log y = \log a + b \log x$, which is linear in $\log y$ and $\log x$. Therefore b is the slope of this straight line while $\log a$ is the y-intercept.

Now both of these values can be determined algebraically from the data in Table II. The average slope of the line, computed from the log y differences and the log x differences is 3.075, which is b in the equation. Using the method of similar triangles to compute the log y intercept, we obtain —1.580; this gives us a value of .0262 for a in the equation. Therefore the equation that predicts high school enrollment on the basis of the data for 1910, 1920 and 1930 is $y=.0262x^{3.075}$ where x and y stand for the same quantities as before.

In order to compute the enrollment

Table V—Summary for Estimates for 1940

Method of Estimate	Estimate
Exponential curve	9,600,000
1930-1932 projection	8,200,000
Power curve	7,550,000
Logarithmic extrapolation	7,500,000
Simple extrapolation	7,400,000
Parabola	7,400,000
Mean 1920-1930-1932 trend	7,400,000
Annual rate of increase,	
4.2 per cent	7,000,000
Annual rate of increase,	
3 per cent	6,600,000
Annual rate of increase,	, ,
2 per cent	6,300,000

expected in 1940 on the basis of this curve, we substitute 60 for x and solve for y. Using the logarithmic form given above we find that log y for 1940 is 3.878, which gives us a final total value of 7,550,000.

Using Second Degree Parabola

Another curve that is often used to indicate the trend of empirical data is the second degree parabola, $y=a+bx+cx^2$. We have fitted this equation to the data by means of the method of least squares. In order to make the computations easier but still retain a practicable degree of accuracy, we smoothed the enrollment figures to the nearest hundred thousand. The complete data are given in Table IV. The letter "x" now stands for decades since 1880, "y" for enrollment in hundreds of thousands. The equation between x and y turned out to be: y=13,517-13.400x+3.9166x2. For 1940 x would be 6, so substituting this in the equation gives us a value for y of 74, this means a total value of 7,400,000 for the 1940 enrollment.

There seems to be little doubt but

that the exponential curve gives a highly excessive value. An examination of all these estimates would indicate that a value of 7,000,000 will probably not be far from wrong for the year of 1940.

A summary of the estimates of public high school enrollment in 1940 arranged in order from the highest to the lowest is given in Table V.

Many will smile and ask "What is the value of such estimates?" This is a fair question an answer to which need not be evaded. We list several values that such a study might have:

- 1. They force us to look into the future, and hence form the basis for educational planning.
- 2. They show the necessity of formulating a wise public policy now, so that growth may be provided for as it comes without overturning or crowding the system.
- 3. They show us that thousands of high school teachers will be needed to care for this growth; some hope for the unemployed teacher.
- They show us that the growing pains of the public high school are not going to subside for some time to come.

Keeping Up With the Military

The cost of our combined Army and Navy departments for any one year from 1928 to 1933, inclusive, exceeded \$700,000,000. Now if we set a national standard for 1940 of \$100 per pupil, we would be spending no more on 7,000,000 high school pupils than we have been spending on implements and personnel of war. (The per pupil cost in United States in 1930 was \$87.)

With various interests clamoring for reduced budgets on the one hand and increased ones on the other, there is danger that the cause of youth will be ignored. This is a time when youth needs all the supporters that it can find, but its friends should not be absorbed in the present situation so much that they do not see the significant problems ahead, one of which will be to provide adequate educational facilities for an increasing number of youths.

915							
	\boldsymbol{x}	У	xy	x^2y	x^2	x^3	x^{i}
	1	2	2	2	1	1	1
	2	5	10	20	4	8	16
	3	9	27	81	9	27	81
	4	22	88	352	16	64	256
	5	44	220	1,100	25	125	625
Sum	15	82	347	1,555	55	225	979

Compulsory Registration

By RALPH McCULLOUGH

INCE planning for a better social, economic, physical, mental and moral citizenship is a concern of the state, it is the function of the state to see that information is obtained and kept up to date concerning its citizenry. This information should begin with registration of every person, old or young, within the United States. Registration should be compulsory and made locally, and the person registered should be given cards to carry showing the registration. These cards should serve the same purpose as a passport and should be kept up to date and renewed each year or whenever a person takes up a new resi-

With information gained concerning each person, what use could be made of it? The first use would permit plans for education. Each community would know in advance how many children would be of school age each year, a fact that is known in most states only a few months before the child enters school. This registration could also be used for adult education. Education is a concern of the state for all its citizens so let us get a way by which we may get information and then use this for careful planning of more education for our people whether they are children or adults.

Aid in Law Enforcement

Another use to which this information could be profitably put has to do with law enforcement. Each person would have a card or pass to be shown upon demand. The records back of these cards would be on file and thus a life history of the individual would be available to any law enforcing officer. Some may say this involves too much work, but the state is responsible for its citizens and

why not have information concerning

If there is information available for use those who need relief can be given help and at the same time required to attend an adult school where they may be taught useful vocational subjects and fitted for better citizenship. There should be training and a follow-up method whereby each one could be placed back into the natural channels of industry, trades or professions. Adult education should be a regular part of our existing educational systems as established in the various communities but should be supported or aided by federal subsidies or grants in the form of equalization aids.

Use in Social Reforms

Those who are mentally or physically incapacitated would, through this system of registration, be known and could be given care. Care could be a part of a health insurance program and should be the means of disseminating useful information as well as hospital service or corrective medical aid to those in need. By knowing and planning, the physical and mental health of each individual could be bettered and thereby millions of dollars saved which are now lost through either mental or physical ill health.

With the enactment of an old age pension law this registration would help, justly and efficiently, to administer the program. The registration should be complete enough to give such information as property holdings, income as well as age, dependents and information of that nature.

Registration could and should be used for election purposes. This should stop some of the padding of registration books for elections.

A law might be passed by Con-

gress to set up such registration and let it be made a duty of the post office department to register everyone, since this department more nearly than others serves the whole people. The department of justice could enforce registration and see that it is kept up to date, and the information filed for use by each branch of government. The aim of free society is to encourage self-discipline, independence and individuality. Can such an aim be realized if a government has no plans for complete development of each individual, and can a government plan without information on which to base plans?

Experiencing Music

By Alice G. Thorn

If, as teachers and parents, we are seeking to enrich the lives of our children through music, then we ourselves must have had such an enrichment at some time in our own experience. Even though, through unfortunate circumstances, music has ceased to be a vital moving force in our lives, it is often possible through contacts with children to recapture some of these experiences of the past.

It is characteristic of most young children to be interested in music, if we consider music to include experiences in sound and movement. Their behavior is characterized by an openminded attitude toward that which is new. They are eager and curious for all kinds of experiences in sound and movement. A study of the spontaneous musical behavior of the children helps us relive and thus understand some of these real experiences of childhood and gives us a clue as to the kind of experiences for which children show signs of readiness.

The teacher who enjoys music, who has a knowledge of the growth of music from simple experiences in sound and movement and of musical literature for young children, can satisfy needs and interests as they appear. In this way music can be made a satisfying, meaningful experience for both teacher and children.

A Good Workbook

From the Teacher's Point of View

N THE last analysis a workbook can be no more than a means to an end. Its function is to facilitate the teaching and learning processes as they must be carried on in the modern school. It follows that the workbook may be either an utterly valueless instrument or an indispensable tool, depending upon the nicety with which it is adjusted to the instructional situation in which it is used. Final appraisal of the workbook, therefore, ought to be based upon its effectiveness in actual use in the classroom.

The development of the perfect workbook would have been a comparatively simple matter, if the school were one and the same thing throughout the country and if it had remained unchanged through any considerable length of time. But schools in one locality may differ materially from those in another. And the school of yesterday is certainly not the school of today. Our changing world, as we have been told so often, is compelling changes in the organization of our schools, and in the very purposes and techniques of instruction. Consequently, criteria for the appraisal of workbooks may need ultimately to be developed locally to ensure the preparation or the selection of the most effective instructional aids

Classroom Procedures Modified

Viewed at too close range, the numerous differences among schools in America produce an impression of hopeless, hapless confusion. Viewed with greater perspective, however, the same detailed differences melt into manifestations of broad movements which definitely influence classroom procedures. As classroom procedures are modified by these forces in characteristic ways, so are

workbooks changed to meet new needs.

What are these forces? In what ways are they affecting organization and instruction in schools today? What bearing have they upon the development of the modern workbook? What would be the characteristics of a workbook that presumably could be used effectively by the teacher who strives to "keep up with her profession"?

Forces Affecting School Situation

Among the forces that have been affecting the school situation of recent years, these three cannot be ignored: (1) the urbanization of the school population in the United States; (2) the vitalization of instructional methods, and (3) the increasing complexity and the changing nature of the social order in which the school attempts to work.

The fact that more than 50 per cent of the nation's population is now to be found in cities of more than 8,000 inhabitants1 carries with it wide implications for the schools. Obviously, the day of the one-room rural school is gradually passing. The day of the consolidated, complexly organized grade school is here. Of course, American schools of secondary and higher rank have long found it desirable to use a closely knit, complex organization. They must draw their pupils from wide areas. Centralization came for them from financial necessity. Now, the elementary school is being driven toward centralization by the social pressure of concentrated school populations.

¹Research Bulletin of the National Education Association: Modern Social and Educational Trends. Vol. XII, No. 5; Nov., 1984.

By WENDELL VREELAND

This centralization of elementary education, wherever it occurs, immediately produces problems which in a decentralized organization would pass unnoticed. The very concentration of the school population, however, facilitates the solution of the problem it produces. When many children live within a fairly restricted area it becomes financially feasible to care for specialized types of schools and services. Again, no city of any considerable size today fails to differentiate its schools with respect to the successive levels of maturity and interest through which a pupil passes.

Adjusting to Individuals

Within the organization of any one school there are further evidences that the administrator has recognized the need to adjust to individuals. Provision of special rooms, departmentalization of the upper grades and the adoption of such a plan as the departmentalized school are all of them, when considered broadly, manifestations of his concern. The development of various schemes for ability grouping and for flexible promotion may be considered historically as attempts in the same direction. When libraries, workshops, cooking rooms, science laboratories, auditoriums and the like are included in a school, their presence attests the community's desire that the diverse abilities of its school children may find therein rich and wholesome development

At first thought it may appear that these administrative devices bear little relationship to criteria for the good workbook. Second thought,

however, will reveal that every one of these provisions affects vitally the situations in which the individual teacher must carry on her work. It is one thing for a teacher to teach in a one-room country school; it is another thing for her to fit her work into the elaborate organization of an urban school. Unless supplementary instructional aids can be designed to meet the situation as the teacher actually faces it, they can scarcely be efficient. The workbook designed to be effective with mentally deficient pupils may be entirely inappropriate for use in a regular home room. The workbook prepared for use in a junior high school auto mechanics shop would be hopelessly out of place in any ungraded rural school.

Classroom Situations Differ Widely

The movement for the professionalization of education has required a whole train of readjustments which were quite unnecessary in the schools of a generation ago. Because advance in this movement has been irregular, the individual teacher in any given classroom may find herself in any one of a variety of situations. For instance, it may be that the requirements in her school system demand that she have control over the techniques and procedures customarily called an activity program. Or, she may find herself working in a city in which highly mechanized procedures must be mastered before she can receive responsibility for the conduct of a class. Again, she may work in a school system in which the goals of instruction are expressed largely in terms of the acquisition of subject matter. Or, she may work where a pupil's achievement is appraised in terms of his increased power to purpose wisely and to control his own behavior on the basis of reason.

In certain schools, the very use of a workbook is frowned upon. In others, the use of the same instrument may be entirely acceptable. In general, it must be admitted that the workbook, as it has been developed in the past, has fitted most easily into instructional situations in which mechanized processes and subject matter goals were the rule rather than the exception. For many people this has been an incubus which the workbook must shake off before they can recognize worth in formally prepared, instructional aids.

Yet, the diversified instructional situations that are found in the various school systems in the country do not so much set a limit upon the use of workbooks as they set the problem that must be solved in the development of the ideal workbook. There is no necessary relationship between the tendency toward the mechanization of instruction and the development of workbook materials. Workbooks of different types can be developed to meet the diverse instructional needs.

Modern times have probably never seen a day when schools and school people have been as thoroughly responsive to the changing aspects of the society in which they exist as they are at present. Administrative adjustments suggested earlier are in a way recognition of this fact. Vitalized instruction definitely attempts to recognize the implications for education in modern social trends. The educational literature is so full of information and exhortation upon this point that little need be said other than to indicate the effect upon instruction.

Flexibility in Teaching

In general this means two things:
(1) life about the school is being brought into the classroom more generally and more commonly than ever before, and (2) classroom activities are being taken out into the life of the community more than has ever been true before.

These two facts suggest the necessity for sensitivity on the part of the teacher to the problems existing in the community in which she teaches, as well as in the nation and in the world at large. This in turn implies flexibility in her teaching procedures and a willingness to modify both content and method in order to meet the

changing needs in the immediate environment.

In the opinion of some persons, these changes in the instructional pattern practically preclude the use of workbooks. Here again the conclusion may not be well founded. It is conceivable that supplementary instructional aids, in the form of lesson sheets or workbooks, might be organized to facilitate adaptation to changing times rather than to perpetuate the anachronisms of an earlier era.

Characteristics of Good Workbook

The preparation of improved self-instructional materials of the many sorts that might be used in the many types of situations here suggested is too complex and lengthy a subject to go into in detail in this discussion. All that can be attempted is to enumerate a few of the important characteristics of the workbook which is being found acceptable in more progressive schools and to suggest how these features may be realized.

1. The good workbook, other things being equal, tends to foster helpfully an intimate personal contact between pupil and teacher.

The charge has sometimes been leveled against self-instructional materials that they tend to reduce vital, personal teaching to "canned instructions." The teacher becomes unnecessary to the pupil's progress in his work; the pupil finds himself left with an impersonal instrument that has no warmth or life. However, this is not necessary. A good workbook is written directly to the pupil by the teacher; it preserves the finest type of serious personal interest, as would a personal letter from one friend to another. Further, a good workbook foresees its own shortcomings and directs the pupil to seek the teacher's help when it is needed. In fact, the use of the workbook in a class may make it possible for the teacher actually to give her pupils more personal attention than she could, were the time-saving workbook not there.

2. The good workbook utilizes as

many as possible of the available materials and opportunities for experience.

Often the opinion is expressed that the workbook is a crude and inefficient substitute for a textbook. This opinion reveals a complete misunderstanding of the character and function of a workbook. After all, when instruction is restricted to the contents of a single text, the experience, and consequently the understanding, on the part of the pupil must be comparatively superficial and incomplete. The good workbook manages the learning situation in such a fashion that the pupil reads in several texts, delves into many related volumes and perhaps attempts experimental application of his generalizations from study.

3. The good workbook utilizes completely the findings of the scientific study of the learning process.

In the past, many teachers have fallen into the error of considering a workbook an abridged textbook. As a result, the skilled teacher has prepared lesson sheets which compare favorably in quality with the general run of textbooks but which ape their logical organization of subject matter and give little consideration to the possibilities of psychologic arrangement. This has meant that lesson sheets have been analyzed largely on the basis of the adequacy of their presentation of material in a well-defined field, as judged by the expert in that field, and that little or no attention has been paid to the organization of basic experience in terms of the thought processes of the one who is doing the experiencing.

When workbooks achieve psychologic organization, their authors will find ways of writing into them the "drawing power" of purposes that are more closely associated with the immediate life needs of the pupil.

4. The good workbook provides adequately for maximum growth on the part of all learners, no matter what their types or general levels of maturity.

It is not enough to organize a workbook on a psychologic basis. A

good workbook recognizes that there must be variety of opportunity for the different types of pupils that are always found within a class. Each lesson must find ways of differentiating the assignment. Several conflicting suggestions as to the basis for this differentiation are to be found in the literature,² and consequently the author who is preparing a workbook will find it profitable to study the problems involved with some care before standardizing his technique on any one basis.

The good workbook stimulates in wholesome ways the assumption of responsibility by the pupil for all aspects of his work.

The good teacher finds ways to transfer the responsibility which he has conventionally assumed for pupil success from his own shoulders to

"Ryan, Heber Hinds, Adapting Instruction to Individual Differences in Mental Ability, Junior-Senior Clearing House, September, 1932. those of the pupil. Similarly, the good workbook finds way to encourage the pupil more and more to assume responsibility not only for the excellence of his finished work but also for selecting the problems he attacks, for planning ways and means to solve those problems, for appraising the quality of his solution and for investigating the broader meanings of his study.

The good workbook provides effective training in the technique of self-diagnosis.

Probably there is no single realm in which a transfer of responsibility from teacher to pupil is more important than in the development of the ability to diagnose one's own difficulties. However, it should be recognized that there are possibilities in the development of improved lesson materials to provide specific training in the techniques of self-diagnosis.

Survey to Help Pupils Plan Careers

Sophomores in Michigan high schools show an amazing variation in mental ability, with mental test scores ranging from 10 to 230 points, according to a survey of 12,878 pupils in this class, from 176 schools.

This difference in ability throws into sharp relief the most difficult task educators face, that of guiding pupils into courses in which they may make the best use of their capacities, according to the report of the survey sponsored by the Michigan High School Principals Association.

The survey, begun in 1935, involved giving each sophomore a mental test and a questionnaire. In the latter the pupil answered in his own way questions concerning his activities in and out of school and his plans for a future career. The object of the study was to help the principals help the pupils by discovering some general truths about pupil abilities and hopes based on a large number of cases, according to Dr. Clifford

Woody, director of the bureau of educational reference and research, University of Michigan, who directed the study.

Small, medium and large schools apparently get the same variety of pupils and teach them on similar levels, for the intelligence test figures were almost identical in all three classes. The smallest schools had a very slight superiority in pupil quality, which may be caused by a greater elimination of the less intelligent, Doctor Woody states.

There are a few more girl sophomores than boys, but the latter seem to be slightly superior, although their scores also cover a wider range from poor to brilliant than do those made by the girls. White pupils are apparently much more able than those of colored races, but the comparatively small number of the latter plus certain other factors make questionable whether the difference is as great as was shown.

Happy to Say

By WILLIAM McANDREW

HIS month's prize bouquet goes to William Campbell, the sturdy old Roman who for years was the dean of the board of examiners of the Chicago public schools, the St. Peter who guarded the gate through which good teachers passed into the system. Politicians, in the board of education and out, were ever moving to push this William the Trusty out of his place, but under the Illinois law all hiring and firing have to be done on recommendation of the superintendent of schools. The superintendent would continue to nominate Campbell for a new term of office; the board would refuse to approve him, but legally the examiner remains in office until a successor is confirmed. Campbell was a continuous successor until the age of retirement when he laid down his marking pencil a man admired, respected and beloved by all honest citizens. Out of the stores of his memory Campbell has written a sizzling piece: "What Chicago Does to Its Superintendents." Educational magazines galore have reprinted it. Threlkeld, president of the Department of Superintendence, has put out thousands of copies of it, one to every member of the association.

N THE protest of a school superintendent recently failing of reelection occurs the claim that he had prepared and delivered 3,159 speeches during his eleven years in the town. Good! A woman teacher in our county declares that the less she talks and the oftener she induces pupils to do it, the more valuable she is. She estimates that she is responsible for 8,793 speeches in a school year. They are short and hit the mark. She is still holding her position after twenty-two years of it.

As THE graduates of Southwestern Louisiana Institute, a college in the land of the Acadians, marched in their robes to their ceremony in the cypress grove on the campus, I noticed that as the procession reached a certain point each woman of the faculty and each girl graduate broke into a smile. As each successive marcher, on passing this spot, made this spontaneous salute of happiness and affection I searched for a solution to the pleasant mystery. It was that in the crowd lining the path of the march the wife of the college president happened to be standing at that point. Do you get it?

NOTICED another quite remarkable thing. The president, Edwin Stephens, instead of merely telling me how to reach a hall I wanted to see, walked thither with me. In the course we met seven or eight young men. Stephens called each by name and of most of them he asked some interesting question. It may be the high-hat type of college head has no place in the neighborly South. Outside of Dixie, I have walked with university presidents meeting scores of students whom the great man noticed not, nor they him. It reminded me of the sweet bit of verse:

When e'er I take my walks abroad How many poor I see And as I never speaks to them They never speaks to me.

But this high-hattery, let us rejoice, is passing.

CORRECTION may remove error but generate little impulse for the future. Specific praise corrects mistakes and produces intent to succeed.

EMOCRACY depends upon free speech. Our forefathers who framed our government fully recognized this fact. Nevertheless, we are always afraid of the idea. Obviously, much of this fear is derived from selfishness.

Those persons who believe they have positions of advantage fear that these positions may be altered if freedom of speech gets under way. This selfish fear may characterize a person who has gained his material wealth by exploiting his fellowmen or a superintendent of schools who fears his status might suffer if the teachers on his staff made a practice of speaking freely on all subjects.

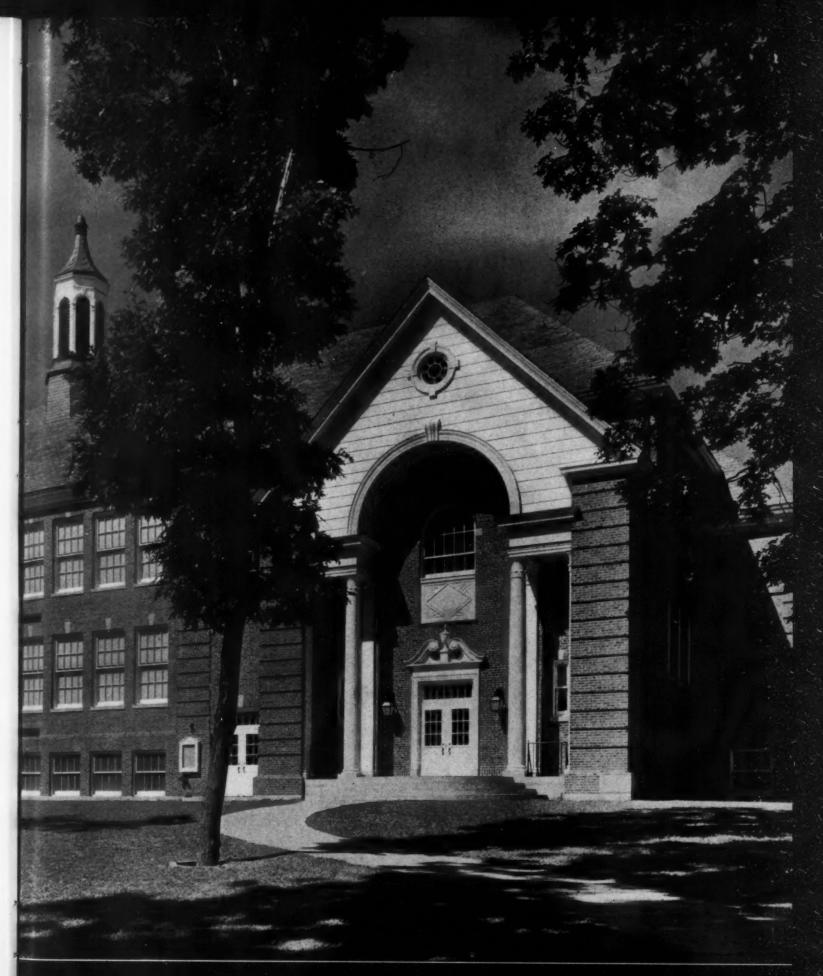
The teacher may fear what free speech would do to his way of teach-

President A. L. Threlkeld of the Department of Superintendence with this discussion of "Free Speech" introduces a new monthly feature for this page—a short signed editorial by a leader in the profession.

ing and to him. He wants to feel that security in his loyalties which a thinking person feels only if the objects of his loyalties show survival value in the face of severe competition. Probably most people in the world have some fear as to what would happen to them if they were exposed to free speech.

This kind of fear is out of place in a democracy. A person who believes in democracy does not wish to maintain a position which cannot survive the free interplay of ideas. Such a person continually subjects the objects of his loyalties to the test of free criticism in order to keep his feet on solid ground. If he is afraid of this way of life, he is afraid of democracy.

We who are engaged in the service of education should be the last to give up this principle of free speech. Without it there can be no education. Without education there can be no democracy. Without democracy there can be no respect for personality. Without respect for personality there can be no life worth living.—A. L. T.



THE SCHOOL PLANT

High School Built on Five-Year Plan



John Marshall High School, Rochester, N. Y., is colonial Georgian in style. Brickwork is set off by limestone trim and painted window frames and sash. The southwest entrance is shown in detail in the circle.

By FRANCIS R. SCHERER

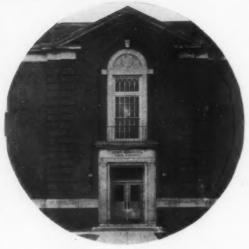
BY ANNEXATION the city of Rochester, N. Y., acquired in 1919 a part of the town of Greece lying in the vicinity of Kodak Park. The annexed territory contained a district school with 574 pupils in the grammar division and 45 pupils in the high school division. Increasing numbers made it necessary to move the high school division into quarters of its own.

A former factory site was purchased and the main building thereon remodeled to house the high school pupils until such time as a new building could be erected. These temporary facilities, named the John Marshall High School, were opened in September, 1926, with 357 pupils belonging in Grades 9 through 12.

The rapid growth in school popu-

lation, principally in secondary schools, made necessary a building program so extensive that the city found it difficult to finance all of the needed projects. The board of education, scheduling its new buildings in order of greatest need, arranged for the new John Marshall High School to follow immediately the Charlotte High School, building contracts for which were awarded in July, 1931.

When the federal government, in its effort to assist the heavy industries, offered to aid governmental subdivisions in financing projects through the agency of the Public Works Administration, the new John Marshall High School was included in a list of several items advanced by Rochester. Subsequently a loan and grant



agreement for \$1,490,000 was executed by the federal government, with the city as the borrower, and the board of education as the constructor. Under the terms of this agreement the federal government gives a grant not to exceed 30 per cent of the cost of labor and materials employed upon the project. All drawings, specifications and contract documents were submitted to the state engineer, PWA, for review and subsequent recommendation of the project to the PWA board at Washington, D. C.





Down the cafeteria line at the new school. In the circle is shown the cupola of lead-covered copper over a steel frame. It surmounts the pitched black slate roof of the building's four-story section.

A survey and study of the district to be served was made in July, 1933. At that time there were about 1,300 pupils in Grades 9 through 12 housed in the old building. In addition to this number, provision was made in the first unit of the new building for estimated normal growth in a district not yet entirely developed, and for the eventual inclusion of the eighth grade. Thus it was planned that the new school would operate as a five-year high school as the 7-5 plan was about to be adopted throughout the city as the result of

the board's inability to house adequately the pupils of the upper grades on the 6-3-3 or 6-6 plan.

In common with many another city, Rochester had experienced a threefold increase in numbers in the upper grades during the postwar period. This study indicated the desirability of having the first and major unit of the new school provide a working capacity for about 2,000, with provisions for an addition to house an additional 500 to 600 pupils.

The building has been planned to house three courses of study, *i.e.* Course I, foreign language or college preparatory; Course II, academic without foreign language requirements but with option of electing to major in social studies, science, fine arts, mathematics, handwork or domestic science, and Course III, commercial.

Based upon a study of the distribution of pupils into the several subjects of these three courses in other Rochester high schools, it was determined that the following instructional facilities would be required:

No.	Rooms	Size	Capacity
35	Classrooms	31	1,085
1	Craft shop	30	30
1	General shop	30	30
1	Cooking	30	30
1	Sewing	30	30
2	Physics	30	60
2	Chemistry	30	60
1	General biology	30	30
1	Physical geography	30	30
3	General science	31	93
1	Vocal music	30	30
1	Instrumental music	60	60
1	Drafting	30	30
2	Art	35	70
2	Bookkeeping	35	70
1	Office practice	30	30
3	Typewriting	35	105
4	Study halls	100	400
2	Gymnasiums	90	180
1	Swimming pool	60	60
	Total		2,513

*Theoretical.

In the Rochester high schools, the satisfactory working capacity of a building has been found to be about 80 per cent of the theoretical capacity, which makes full allowance for the difficulties of filling all classes to optimum size and for programming each facility for each period in the week. Thus the rated working capacity may be taken as 2,010 pupils.

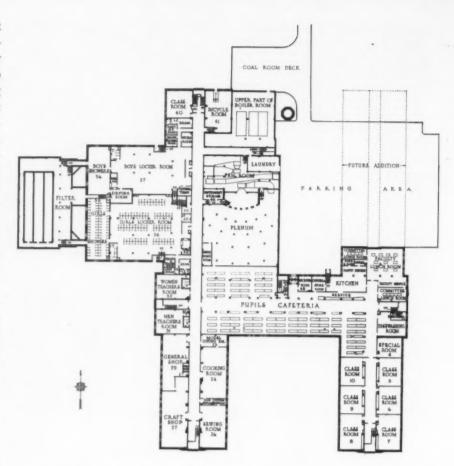
Other instructional facilities included in the building are not rated as capacity facilities. These include boys' and girls' corrective exercise rooms, the library and the auditorium. They are omitted from the computation because pupils using them have first been programmed into other classes, e.g. those using corrective exercise rooms are taken from regularly assigned health education classes, those using the library are excused from their assignments to study halls, and those using the auditorium usually are programmed to classes in English or music.

In addition to instructional rooms the building includes administration quarters, medical quarters, pupils' bank, bookstore, ten teachers' conference and work rooms, teachers' rest rooms and locker rooms, pupils' cafeteria, faculty cafeteria, bicycle room, janitors' quarters, boiler room, equipment room and storerooms.

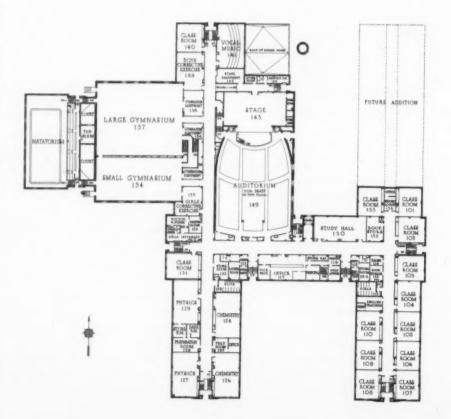
The fact that the old building had to remain until the new one was completed influenced to a large extent the plan of the building. As in the case of the Charlotte High School (The Nation's Schools, July, 1933, p. 35), a plan was developed that provides no interior courts.

A colonial Georgian treatment has been used, the brickwork being set off with limestone trim. Wood sash and window frames are painted to match the color of the stone.

The building is of high quality fire-resistive construction with a structural frame the major portion of which is of reenforced concrete and the remainder of steel. Floor and flat roof slabs are of reenforced concrete with tile fillers, two-way system. Pitched roof slabs are precast with 2-inch precast slabs suspended underneath trusses and ceiling beams for fire protection.



Ground floor plan (above) and first floor plan of building. Bituminous slack coal is delivered at the school almost daily. Trucks dump the coal by gravity into a catenary bin under the coal deck shown.



The four-story section has a pitched black slate roof surmounted by a cupola of lead-covered copper over a steel frame. The three-story section has hip roofs of black slate. Most of the roof area, however, is flat, with drainage fill of cinder concrete and roofing of asphalt and allrag felt.

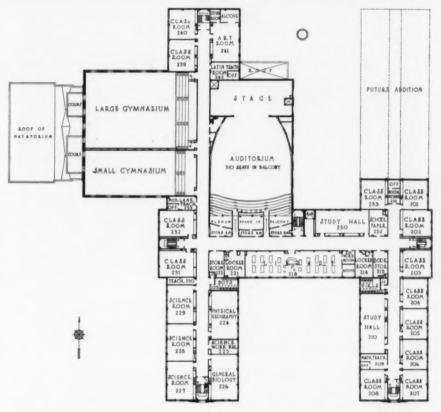
The pupils' clothing is cared for in wardrobes within the home rooms. Separate locker facilities are provided for each pupil in the health education section, locker rooms being so arranged that pupils may go directly to the gymnasiums, the shower rooms, swimming pool or play field without passing into any other part of the building.

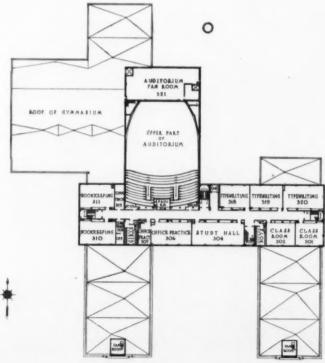
Interior woodwork throughout is of Appalachian white oak. In general, all flooring is of brown linoleum, extending up the wall about 6 inches to form a sanitary coved base. Flooring in the main corridor is of rubber tile, throughout the ground floor occupancy of asphaltic tile, in the library and aisles of the auditorium of cork carpet and in the gymnasiums of end-grain blocks. Stair treads are of hot mastic. The linoleum, rubber tile, asphaltic tile and cork carpet are cemented directly to a cement mortar finished floor laid directly on the structural slabs.

Ceilings throughout, except in the auditorium, toilet rooms and storerooms, are acoustically treated. The acoustical treatment of the auditorium is applied on the side and rear walls. The natatorium, the two gymnasiums and the instrumental music room have ceilings of cork tile; in addition to this the instrumental music room has special sidewall

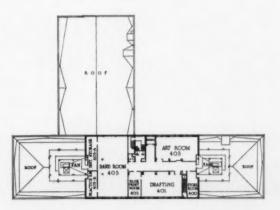
treatment. Typewriting rooms, office practice room and vocal music room have had special materials installed. In general, however, the treatment consists of acoustical plaster.

A wainscot of glazed tile about 6 feet high extends throughout stair halls, corridors and toilet rooms. In the gymnasiums the walls are of glazed tile to the full height. Through-





Floor plans: second (above), third (left) and fourth (below). The working capacity of the building is 2,010 pupils. Third and fourth stories have pitched roofs. Most of the roof area is flat, with roofing of asphalt and felt.





The main corridor, which serves also as the foyer, is finished with a molded and strapped segmental arch ceiling, with walls paneled and pilastered in composition material. Below is the craft shop.

out the ground floor and in the natatorium, the walls are of unglazed tile. Above the tile wainscot and in general for all side walls, plaster finished with white putty-coat is used. The main corridor, which also serves as the foyer, is finished with a molded and strapped segmental arch ceiling, with walls paneled and pilastered in composition material.

The auditorium, readily seating 1,416 adults, carries out the colonial feeling. The floor is dished and the sidewalls splayed to achieve the best in hearing and seeing from every seat in the room. In front of the stage, an orchestra pit will accommodate the seventy-five members of the school orchestra.

The stage is equipped with footlights, border lights and a batten of baby spots with dimmer control on all stage lights and receptacles, as well as on the main chandelier in the auditorium. Two flood lights in the ceiling of the auditorium illuminate the orchestra pit and two others the extension of the stage beyond the proscenium wall.

Three HRT boilers, 72 inches by 20 feet, have been installed, each suspended in a brick setting and equipped with an underfeed stoker.



Bituminous slack coal is delivered in trucks at the school almost daily at the present cost of \$4.80 a ton. Concrete bunkers have been provided below grade for the storage of about 300 tons for emergency purposes. Daily deliveries are made by coal trucks, which dump the coal by gravity into a catenary bin under the coal deck where, in turn, it is emptied into a half-ton bottom dumping dory. This is lifted by an electric hoist, carried over the hoppers of the stokers on a monorail system and emptied into them.

High pressure steam is used in the laundry, the cafeteria and for the heating of hot water. For general heating, low pressure steam is used with a vacuum system in connection with the returns. A duplex system of vacuum and return pumps has been installed, one operating by steam and the other, cross-connected with it, operating by motor.

Heating and ventilating is by the split system. With but few exceptions, ventilation is by means of both supply and exhaust fans. In the classrooms and smaller occupancies, heating and ventilating units have been installed, there being seventy-two of these. A large fan supplies the auditorium at the ceiling, the exhaust being taken out through adjustable mushrooms under the seats cared for by an exhaust fan. Separate supply and exhaust fans are provided for the locker rooms, shower rooms and natatorium. Exhaust fans have been provided to care for the entire building other than the gymnasiums. In this climate the exhaust fans are found to be particularly beneficial in the spring and fall when outside temperature is frequently high enough so that no supply fans need be run, the windows being kept open.

Items that may be of special interest include the following:

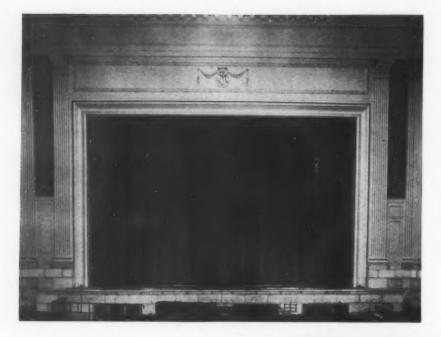
 Use of marble window stools throughout in an effort to reduce the excessive maintenance cost involved in keeping wood stools properly finished.

2. An arrangement of approaches from both boys' and girls' locker



A corner of the library showing the cork carpeted floor. In the gymnasium, below, walls are of glazed tile to the full height. Double-hung windows are operated by a rack and pinion so as not to interfere with the flush wire guards at the openings.

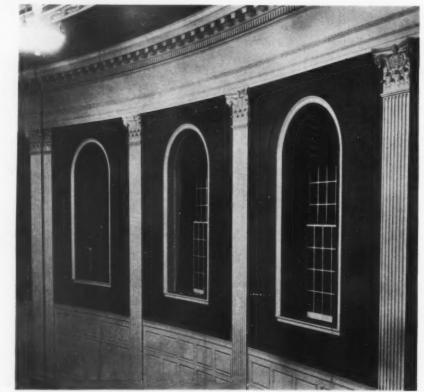




The auditorium stage is equipped with footlights, border lights and a battery of baby spots. Below is a detail of the auditorium wall, showing how the colonial feeling has been carried out. The floor of this room is dished and the sidewalls are splayed, to provide proper vision and acoustics for every seat. Accommodations are provided for 1,416.

rooms to small or large gymnasium, thus permitting the use of either space depending upon the size of the class to be accommodated.

- An arrangement of operating double-hung windows in the gymnasiums by means of a rack and pinion so as not to interfere with the flush wire guards at the window openings.
- 4. A small locker room next to the attendance office which tardy pupils must use in lieu of their home room wardrobe facilities.
- 5. Underwater lights in the swimming pool installed for reasons of safety only; these can be instantly turned on from either end of the natatorium and will reveal all objects in the pool even in cloudy water.
- 6. In the boys' locker room, an individual locker, 9 by 12 by 20 inches, set up in the ratio of six to one 9 by 12 by 60-inch locker, each small locker being equipped with a combination padlock. After a boy has changed into gym clothes his lock is transferred from his small locker to the larger locker, and this process is reversed as the boy leaves the gymnasium class.
- 7. In a somewhat similar manner a locker, 9 by 12 by 30 inches, has been provided for each girl in the school. The large locker is a component part of a dressing booth, 3 feet square. Better results have been ob-



tained by having the girls' clothes and belongings locked in the locker, leaving the door of the dressing booth open when not in use. Dressing booths have been provided in the ratio of two for each shower stall.

8. In the boys' shower room, shower heads spaced 27 inches on centers over the entire ceiling. This provides with economy and certainty a shower for each boy in the class.

Master controls are provided on each of three sections so that a third, twothirds or the entire room can be used depending upon the size of the class.

 At least one electric receptacle in each room for connecting instructional equipment, such as the movie projector or stereopticon, or equipment for scrubbing and waxing floors.

10. Pupils' desks and furniture in rooms having linoleum or cork car-

pet floors of the movable type except in the four study halls where stationary seats have been fastened to the concrete through the linoleum.

11. Main panel of the central radio located in the administration quarters. The radio will have two channels with a speaker in each room, also an arrangement for broadcasting throughout the school from the stage of the auditorium.

12. A central vacuum producer with outlets in all rooms, and with special soot separator attachment to permit the cleaning of boiler flues each night.

An emergency lighting system has been provided which automatically cuts in upon failure of the house current and illuminates, sufficiently for purposes of egress, both the auditorium and natatorium and the principal exits therefrom. It likewise illuminates the boiler room. The electric clock and program system and the fire alarm system are directly connected to the house service and cross-connected to this emergency service.

The following construction contracts for the main building were awarded in April, 1934:

	Net Total
Type of Work	Contract
Mason \$	585,723.16
Carpenter	100,894.41
Stone	25,969.00
Painting, finishing	11,636.60
Roofing, sheet metal	18,443.10
Tile, terrazzo, marble	15,769.08
Linoleum, other floor coverin	g 23,535.44
Heating, ventilating	124,725.80
Plumbing, vacuum cleaner	60,954.50
Electric	42,990.15
Elevator	3,424.00

\$1,014,065.24

These contracts were nearly onequarter million dollars below the estimates and subsequently the loan and grant agreement was amended to provide for the erection of the natatorium addition from the unexpended surplus. This gives the John Marshall High School the same facilities afforded in all other Rochester high schools constructed during the postwar period.

The following construction con-



A busy hour in the laboratory. Every room has at least one electric receptacle for the connection of motion picture projectors, stereopticons or the equipment for waxing and scrubbing floors.

tracts for the natatorium section were awarded in August, 1935:

000 00
989.00
3,950.00
463.00
3,215.00
15,458.00
2,833.50

\$68,253.50

The contracts for the main building and the natatorium section total \$1,082,318.74. The volume of the building, determined in accordance with the method of the American Institute of Architects, is approximately 3,947,000 cubic feet, with a resulting unit cost of about 27.4c per cubic foot. This figure is exclusive of site, equipment and design costs.

Equipment for the school was given lengthy study by a special committee. As a result, substantially all of it has been specially designed and custom built for durability. Experience gained from the repair and maintenance of school furniture and equipment in the system definitely showed the wisdom of procuring items that were primarily of sound materials and construction, as well as pleasing in appearance, although such procedure obviously resulted in prices somewhat above those prevailing for certain ready-made or factory designed items. The total expenditure for equipment will amount to approximately \$159,000. Major contracts comprising this total include:

Science	\$28,702.72
Electric clock and program	3,161.00
Gymnasium	4,698.00
Fire alarm	2,755.00
Metal shelving	5,794.19
Library	2,653.65
Window shades	1,270.63
Metal lockers	11,561.51
Auditorium seating	6,382.62
Kitchen, cafeteria	12,950.00
Home economics	6,390.97
Office counter	1,299.49
Stage	4,362.00
Special lighting fixtures	3,275.00
Laundry	5,801.00
Folding bleachers	4,920.00
Centralized radio	4,632.00
Combination desks and chairs	13,375.00
Wood chairs, other furniture	3,737.22
Typewriters	3,420.00
Steel desks	3,180.00
Science apparatus	2,276.29
Lathes, lathe tools	1,799.70
Lunchroom tables	1,198.75
Pianos, chairs, cover	1,829.00

Total \$141,425.74

The remainder is accounted for by smaller contracts and purchases of equipment and supplies needed to have the building completely ready for use.

The building opened last September with 1,665 pupils enrolled. It was dedicated on April 26, 1936, and it is expected that final work will be completed on the natatorium section and all contractual matters adjusted by July.



A typical schoolroom showing the rapid drop in light intensity across the room away from the windows.

Seeing Things in a New Light

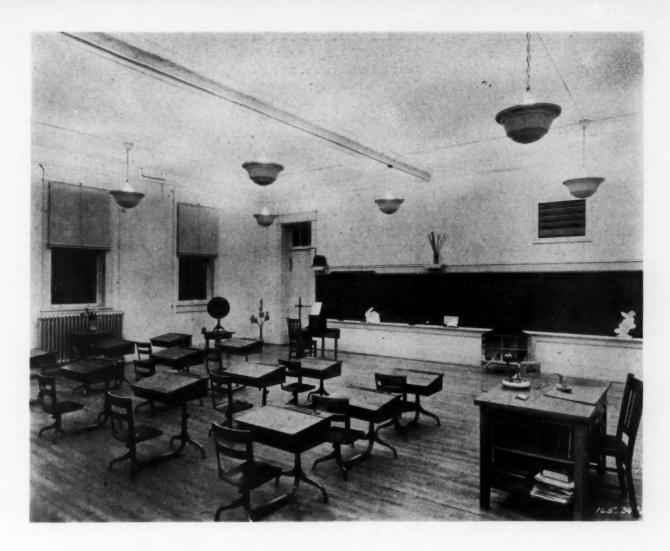
By R. T. PIERCE

So FAR as visual requirements for adequate classroom illumination are concerned, it is now generally agreed that 10 foot candles represents the minimum limits for classroom work. In many cases, a minimum of 15 or even 20 foot candles at the darkest portion of the room will be desirable. There is no reason to judge whether these standards are now being met, for foot candle readings at any point in the classroom can easily be determined with one of the small photo-electric

illumination meters now available.

Room design for maximum daylight illumination and electrical design for adequate illumination under night conditions are obviously problems for the architect and lighting engineer. They involve size and shape of rooms and windows, desk arrangement, ceiling height, color of walls and ceilings, type of electrical fixtures, wattage used and the like. There is nothing particularly difficult or unusual, either for new schools or old, in thus assuring an available source of adequate illumination, once the standards to be met and the necessity for their maintenance are recognized.

The crux of the matter, however, is the necessity for proper utilization of the light sources to maintain these standards in day-after-day operation under varying conditions of daylight. No classroom is necessarily properly heated just because there is a furnace of adequate capacity in the cellar, nor is the adequacy of the heating left to the subjective determination of the teacher or some other individual. Modern heating systems for



Sight conservation classroom at Mansfield, Ohio, where automatic illumination control resulted in increased educational effectiveness. Below, "test classroom" at Tuscumbia, Ala., with arrow indicating "electric eye" light collector above the blackboard.



schools are now almost universally equipped with thermostatic controls which automatically maintain the temperature level between predetermined limits. Today, lighting standards are recognized to be as definite as temperature standards, and as important to classroom efficiency and welfare of the pupils. Modern school lighting systems are now utilizing a similar automatic control over the illumination level. In these installations, the artificial lights in the classroom are turned on and off with changes in daylight by means of a photo-electric control to maintain a minimum illumination level of 10 to 15 foot candles at the darkest portion of the room.

A number of methods of arranging the photo-electric control units for classroom lighting are available, dependable upon the specific conditions encountered and the allowable investment in such equipment. The arrangement that has been most generally used up to the present time calls for an individual electric eye in each classroom installed on the wall of the room in such a position that the light affecting it will bear a proportional relationship to that received on the desk tops at the side of the room farthest from the windows.

This photo-electric cell is electrically wired to a relay control box, which need not be located in the classroom unless so desired. In this control box are located two light-value indicators on which are set the desired foot candle values at which the artificial lights are to be turned on and off. When changes in daylight reach these levels, a switch in the light circuit for the room is automatically thrown.

When a single control in each classroom operates the entire lighting circuit, there will obviously be times when adjustment for adequate light at the far side of the room results in unnecessarily high illumination levels near the windows. In one installation, therefore, a separate control for the row of fixtures farthest from the windows was found desirable to meet this situation. In other cases, the lighting in a group of rooms of similar size and similarly situated with regard to outdoor illumination can be controlled from a single unit. This system, particularly applicable to new school buildings designed with automatic illumination control in mind, permits maximum economy in installation costs.

Definite evidence is available that visual strain resulting from insufficient light may take place over a considerable length of time before individuals are themselves aware that lighting is inadequate. When the decrease in daylight takes place gradually and when attention is being concentrated on other matters, this situation may be prolonged to an even more serious extent. The fact that the teacher's desk is often in a position in the room in which daylight conditions are above average must also be considered. Comparison of

automatically controlled illumination with an older lighting system in operation at the same school revealed the fact that whole days went by in which some pupils in the room without the photo-electric control received inadequate light on their desks. As might be expected, there were bad days so far as teaching progress was concerned.

Like any other such advance, the adoption of automatic illumination control, as a part of a modern lighting system will appear new-fangled and unnecessary to some persons. "I guess our teachers ought to know enough to turn on the lights on a dark day," is a frequent comment.

The fact is, however, that the abil-

ity to see and the ability to measure the adequacy of lighting are two very different things. Our eyes are self-adjusting and they force themselves to function at excessively low levels without any immediate warning of the strain upon them. That such strain customarily exists in many of our classrooms can be objectively confirmed by the most cursory study of the relation of illumination levels to eye defects.

Based on the experience of those who have put it to the test, the modern school lighting system equipped with automatic illumination control represents a practical and economic advance not only to better sight but to better educational effectiveness.

Hazard From Falling Stones

Periodic inspection of the façades and exteriors of public buildings is necessary for the prevention of accidents from falling cornices and ornamental projections.

How often this should be done depends upon the amount of "gingerbread" on the building and its exposure. At a recent meeting of building managers in New York City it was agreed that the entire exterior should be examined, preferably by using a scaffold, every five years.

Besides the inspection of stonework, other things to be considered are exterior ironwork, metal chimney extensions and awning frames, according to A. H. Morgan of the management division, Real Estate Board of New York, Inc.

The worst enemy of buildings is the weather. Rain water is driven into cracks and later freezes. When water freezes it increases in volume, exerting sufficient pressure on the sides of the cracks to cause them to expand and open further.

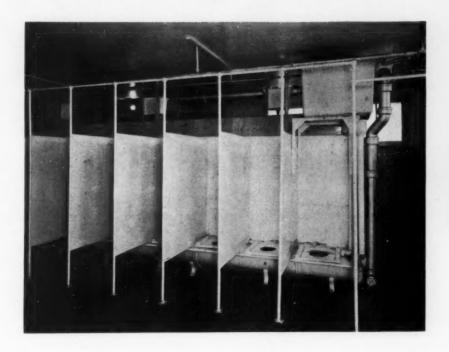
Cracks are originally due either to disintegration of the joint mortar or to the crazing that occurs in terra cotta. The action is hastened by the corrosive and erosive effect of dirtladen winds and moisture. The action is progressive and may result in the breaking off of a piece of stone or may even cause an entire stone to be precipitated on to the sidewalk.

Testing Building Materials

The testing of materials for strength, elasticity and other physical properties is usually carried too far or not far enough, explains Charles Bursch, chief of the division of school-house planning for California, writing in *California Schools*.

When no disinterested and independent tests are made of building materials delivered at a job, unscrupulous material men and contractors are able to unload shoddy and substandard materials at public expense, thus undermining the safety value of good engineering of the plans. The other extreme, Mr. Bursch continues, is to require or permit a multiplicity of tests that serve no useful purpose. Extreme cases are known in which the cost of material tests exceeds the cost of the work under consideration.

New Plumbing for Old



ODERNIZATION" is the building shibboleth of the times and "rebuild America" its catchy slogan. These expressions imply a past neglect of the possibilities and necessity of improvement of our older structures. In large and older cities the greater number of the school buildings will be those which have been in use through the years of the community history. In our new construction we have been new building minded. This condition was natural enough. Cities were growing rapidly, valuations were rising, taxes came in easily and bond issues were floated more easily.

The end or at least the retardation of our recent period of prosperity and expansion has resulted in the present tendency to conserve and improve the older buildings. For a considerable period of our educational development classrooms seem to have been the only type of rooms required in school buildings. As a result many changes are required to meet the demands made upon these buildings to-day for educational facilities other than classrooms.

School systems have been of slow

and gradual growth, building by building, but the development of proper sanitation, ventilation and lighting has been slower. These facilities as provided in our old buildings were in accordance with current practice. Familiarity with customary practice and the tendency to accept such practices as standards have led to the retention of obsolete methods long after they should have been discarded.

In addition to inadequate educational facilities, obsolete systems of sanitation, ventilation and illumination, and lack of architectural character make nearly all old buildings appear more obsolete than they are. This appearance often remains even after other faults have been remedied. The problem of the proper or feasible modernization of the old buildings finally becomes serious and is quite likely to become acute following a program of new construction.

In many localities former conservatism in expenditures for school im-

By G. E. WILEY



Left: A water closet installation of an old type in a building to be rebuilt. In the meanwhile the old, worn cement floor has been covered with a black mastic coating and the trough urinals replaced by modern fixtures placed against marble slabs. Above: Modern type of janitor's slop sink of built-in terrazzo.

provements has so increased the need that the cost of any program of adequate modernization is prohibitive. Under these circumstances the orderly execution of any program of improvements will be intermittent and the needs will be met in the order of their necessity. Any modernization program attempted should, in this case, be arranged in a series of steps in the order of their importance.

After it has been decided that the individual building is properly located and is physically capable of being improved at a justifiable expense, the work required should be arranged in the following order: (1) provisions for health and safety; (2) provision of additional educational facilities, and (3) provision for improved architectural character or esthetic values.

Improvements affecting health and safety will include the replacement of antiquated heating systems and the provision of ventilation as nearly as possible in accordance with modern standards. The lighting will surely need improvement, both natural and artificial. Windows will need blocking up and new windows will need to be added. Old gas lights will need replacement with electric fixtures and obsolete electric fixtures will need replacement with new fixtures designed properly to illuminate the spaces in which they are used.

An illumination survey will prove of great value if it is followed up by making the changes which it shows to be necessary. The health department will see that the toilet rooms are modernized even if the board of education does not. The fire department or fire prevention bureau will see that fire escapes and exits are provided and are safe and will direct other improvements of a fire preventive nature.

In Order of Greatest Need

All of these improvements affecting health and safety may and usually are made as a matter of repair routine in the order of the greatest need or at the direction of other city departments having jurisdiction. These things will be done without the publicity of a definite modernization program.

Let us confine ourselves at this time, however, to sanitary improvements and additional provisions for janitorial service. Nothing so conclusively stamps a building as obsolete as large, dingy, poorly ventilated, foul smelling basement toilets. No part of a building depreciates so fast as do the toilet rooms and the janitor's service closets.

In new construction or in remodeling, savings in first cost in these rooms by the use of other than the most suitable and substantial materials should be avoided if possible. When new plans are considered the marble work in the main entrance lobby should be eliminated before the marble toilet stalls are cut out of the specifications.

The first step in improving toilet facilities will be to see that they are properly located. Except in very small buildings there should be toilet rooms on each floor. These might, if pos-

sible, be arranged so that 40 per cent of the total number of fixtures are located in the basement or lowest floor and the remainder perhaps are equally spaced on the upper floors of the building.

A recent survey of the use of toilet rooms shows that in high school buildings less use is made of the top story toilet rooms than of those on the other upper floors. In old buildings it will probably not be possible to relocate toilet rooms on one of the upper floors. The excessive number of fixtures required by most building codes makes the proper planning of toilet rooms difficult even in new construction. Governing codes, however, must be accepted.

When the toilet rooms have been properly relocated, if necessary, the next step is to plan the room itself. The fixtures should be arranged around the walls of the room and, in cold climates, with few or no fixtures on an outside wall. The use of a wash fountain in the center of the room is often desirable or necessary to secure a satisfactory arrangement. This arrangement will make supervision easy as all the free space in which the children may congregate is in the center of the room. No fixtures should be arranged in tiers back to back on a utility shaft in the center of the room, as is often done.

Planning the Toilet Rooms

The entrance should be shielded by the arrangement of the stalls or by a screen. Wash bowls should be near the entrance door. Space should be allowed for a paper towel box and for a container for used towels. A mirror or mirrors should be provided, preferably not over the basins but at one side so that the basins are made available for use by the greatest possible number.

In old buildings the fixtures themselves usually need replacement. Various obsolete types are still in use such as the range water closets of a latrine type with a stream of water constantly flowing through a continuous trough. In rooms so equipped the urinals are likely to be slate slabs over which a continuous film of water constantly flows, or is supposed to flow. In cases in which equipment of this type has been replaced it has been found that the saving in the water bill alone eventually will pay the entire cost of the replacement of the whole malodorous arrangement, including new floors and wainscots as well.

New fixtures should be of vitreous china, with urinals of the stall type. China water closets with an extended lip are preferable. They should be operated from the seat and should be of the syphon jet type with open front seats. Preferably they should be wall hung, and, of course, of juvenile height in elementary schools.

Need for Washing Facilities

Porcelain or china wash bowls of small size are recommended. They should be mounted on substantial brackets or with a leg and should be equipped with a soap dispenser. In many old buildings the number of basins provided was insufficient; in fact often there were no wash bowls in the toilet rooms at all, a basin being provided in the corridor.

The material used in toilet rooms is important in making it possible to maintain these rooms in a sanitary condition. The floors are perhaps the most important. Only the most impervious type of ceramic tile should be used. Cement and terrazzo are unsuitable as they are too absorbent. Cement floors were often used in the past. In remodeling it is usually necessary to take cement floors out entirely, even including the concrete underbed itself, in order to remove the old toilet room odor. Terrazzo is unsuitable for the same reason but to a lesser degree. There is a danger of its becoming slippery if treated with fillers or dressings and of its disintegrating if it is not so treated. Much depends on workmanship.

The walls should be wainscoted with marble, tile or glazed brick. Glazed brick in some of the new light cream or gray shades makes a good wall treatment and this can well be carried to the ceiling. Twin brick or glazed tile blocks of good quality are also good. An economical use of marble consists of wainscots and stall partions 5 feet high. Stall doors should be $3\frac{1}{2}$ feet high set 18 inches above the floor. Thus the tops of wainscots, intermediate stall partitions and doors are all in line.

The necessity of carrying the door . jambs up to a cap member for head room somewhat mars the architectural effect. Door stiles set in the floor and terminating at the top of the intermediate partitions make an attractive arrangement but that construction is not substantial enough for school use. When marble is used a concealed fastening construction is preferable. This requires stiles and cap at least 13/4 inches thick. Even with a bolted type of construction the thickness should be maintained to prevent breakage, which is sometimes due to deliberate vandalism.

Stall door hardware must be of the most substantial type. Even the heavy government swing type latch will not stand up in schools. Doors should be hung with pivot hinges specially reenforced and of heavy cast construction. Strikes and bumpers should be of heavy cast construction and all rubber members should be pinned in place. A solidly built spring latch with a knob on each side of the door is satisfactory. No perfect coat hook bumper has yet been made.

An almost universal condition of old toilet rooms is lack of adequate ventilation. All toilet rooms should be ventilated by means of an exhaust fan. A satisfactory arrangement is to run all utility shaft walls to the ceiling and in each stall provide vent openings near the floor into this shaft. These may simply be openings in the brick or marble, but they become dirty and will appear better if covered by a screen; however, they remain just as dirty if not screened. Screens serve to keep boys' caps and other things from being poked through into the utility shaft. Besides these openings in the backs of water closet stalls there should be louvered or grille covered openings above the



A modernized boys' toilet room in an old building. Walls are best treated with marble, tiled or glazed brick, and floor with an impervious ceramic tile. Stall door hardware must be substantial.

urinals into utility shafts or into ducts.

Toilet rooms modernized along the lines suggested will remain in good condition for a long time and do much to redeem an unattractive old building.

Sometimes old buildings can be greatly improved simply by being kept clean. Something about the unattractive appearance of an old building seems to encourage janitorial neglect. Exterior walls are black and grimy. Perhaps there isn't a green living thing on the grounds. In these relics of the past the janitor's slop sinks are probably in the corridors and the cleaning tools and supplies are kept in a basement storeroom.

When possible the following provisions should be made for janitorial service: an office or room for the custodian or janitor, with a shower and a toilet so arranged as to be accessible to others; a general storeroom for supplies; a locker or dressing room for women employees, and a service closet on each floor with a slop sink.

The service closets, like the toilet rooms, should be given as sanitary treatment as possible. Such closets are usually the dirtiest spots in the building. This is partly because they are small, have the conventional slop sink crowded into a corner and perhaps a group of pipes passing through the closet as well. Thus inaccessible recesses are provided making cleaning impossible; it is easy to shut the door and leave the dirt in. The "contract system" of janitorial service may also be responsible, through neglect to set up in the schedule a piecework rate for cleaning service closets.

These closets should have a sanitary floor of ceramic tile or terrazzo and should be wainscoted 3 or 4 feet high with marble, tile or terrazzo. A built-in terrazzo slop sink a little above the floor is much better than the fixture usually used. The front curb of this sink should be topped with a heavy noncorrosive metal channel; bronze is most suitable. This is an expensive metal but as a piece only about 2 feet long is required, and as its use makes any other guard unnecessary the expense is justifiable.

When the toilet rooms and service closets are reconstructed in the substantial and serviceable manner described these features will be ready for another generation of use.

Better Plant Practices . . .

Fall Is Time to Start Lawns

Fall is the best time to plant new lawns or develop established turf. This is because weed seeds present in the soil will not germinate until the following spring. The measures taken to improve the grass will therefore not contribute to the growth of weeds.

During September established lawns should have an application of complete fertilizer with organic base. With this some good top soil raked vigorously about the roots of the grass is especially beneficial. The thin areas should then be reseeded with a mixture high in germination and purity, and free from timothy and other coarse grass and cheap fillers. One to three pounds of seed for each 1,000 square feet depending on the stand of grass should be sufficient.

The ideal seeding time for different sections of the country is as follows:

Ohio, Indiana, Illinois: September 1 to October 5.

Michigan, Wisconsin, Minnesota: August 25 to September 20.

Kentucky, Tennessee, West Virginia, Virginia, North Carolina: in general, September 1 to 30 in the mountains; September 15 to October 15 in the lower altitudes, and until November 10 near the ocean.

Maryland: Early September in the western sections; late September for the northeastern portion; October for the southeastern (lower Chesapeake Bay) regions.

Pennsylvania: September 1 to 30 in northern and mountain regions; until October 20 in the south and east.

New York: Early September in the extreme north and Adirondack portions; late September or early October in the south and east.

Delaware: September 1 to October 5. New Jersey: September 1 to October 10 in the western section; until November 1 on the east coast.

Connecticut, Rhode Island: September 1 to October 20.

Massachusetts: September 1 to October 15 and later on the east coast.

Vermont, New Hampshire: August 25 to September 20.

Maine: August 20 to September 15. It should be noted, according to one authority, that in general, mountainous regions must be seeded earlier than low-lands. Those sections—in which the climate is influenced by large bodies of

water—can be seeded much later than other sections having the same latitude. In the northern portions of the regions given, seeding should be done (when not otherwise indicated) near the earlier periods and the southern portions during the later periods.

Summer Reconditioning of Maple Floors

In reconditioning maple floors during the summer vacation, the physical condition of the floor should determine the steps to be taken. If the surface is comparatively smooth and there is no surface film to remove (such as varnish), the floors can be given a thorough scrubbing with soap and water, then rinsed with clean water and allowed to dry thoroughly before the floor seal is applied. Otherwise, the floors should be resanded to a clean and smooth surface.

If steel wool buffing equipment is available, floors can be cleaned without resort to soap and water. With one type of equipment, the seal is applied ahead of the buffing machine. This acts as a dirt solvent and the floor is cleaned and the seal buffed in in one operation. With another type of steel wool buffing machine a floor cleaner is used and the seal buffed in by a separate operation.

Steel wool buffing will not, however, take the place of resanding when uncovering of new material is essential for a satisfactory and attractive job. Nevertheless, hard maple wears down smoothly and almost imperceptibly, so it is seldom that resanding of the floors is required, provided the original sanding job was smoothly done. This brings up the importance of smooth sanding. If the floors are not smoothly sanded in a workmanlike manner, the result in the floor finish will be disappointing, because the innumerable rills or minute fissures will catch and hold dirt. A poor sanding job may prove worse than none.

Many a good floor job has been ruined because of a coarse sanding job. It would have been better to have hand scraped any protruding joints in the floor and to have passed up the sanding.

Vacation Hints for School Floor

Floors, no matter what type, must be treated as a piece of furniture if they are to be kept in perfect condition, according to E. H. Raum, custodian of

Easttown Township School, Berwyn, Pa.

"Constant care and really knowing the materials you use cannot be stressed too strongly," Mr. Raum says. "My experience has been to try materials under most severe conditions before applying them to the floor. I have done this with dozens until I have found the most suitable for the particular floor. Once you have the materials that suit your conditions the rest is easy.

"Maintaining floors is not as expensive as most persons believe. Using good materials to put them in condition, of course, is the major expense. After that the cost is practically nothing. Therefore you have a considerable saving over a period of time.

"Floors in our school building at the very beginning of summer vacation are thoroughly dry cleaned, then wet mopped, and these processes are followed immediately with taking up and drying of all wet places. This is followed with liquid wax. The wax is given a special treatment of my own formula from which I have obtained excellent results.

"Floors after being conditioned require little water, sometimes none at all. Water, except when a floor gets very dirty, is not good for a floor. Water has ruined more floors than traffic, no matter how heavy it may be.

"During the summer our floors are gone over every other day instead of every day, as when school is in session. I find this routine not only saves time but keeps the floors in perfect condition at all times.

"We never sweep our floors with a broom or brush. We use a short nap (36-inch) mop, which is treated for a week with a special preparation. All mops, wet and dry, are so constructed that no lint of any kind is found on the floor."

AN INVITATION

Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.

Doing Right by the Dishes

By LULU G. GRAVES

THE kitchen of the school lunchroom is not merely a place from which food of good quality is served to pupils and others at a minimum cost. It is a center in which health education may be taught by practical application.

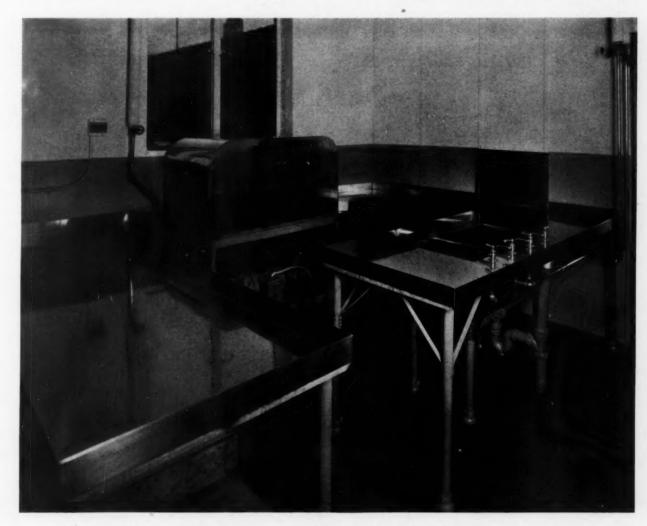
From the standpoint of sanitation dishwashing is one of the most important processes in the culinary department and the person assigned to it should be intelligent and dependable. If pupils are delegated to this work, they should be carefully instructed and supervised.

A few years ago numerous stu-

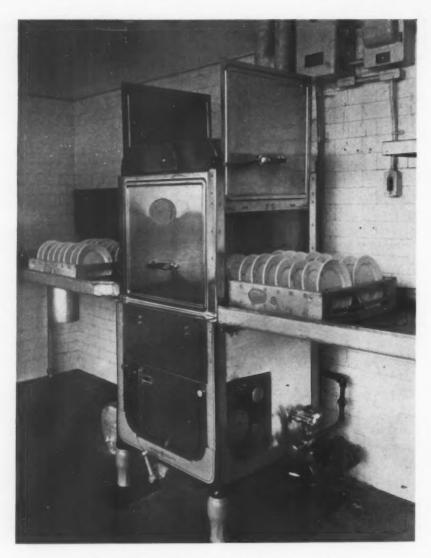
dies were made in such institutions as schools, hospitals, restaurants, army camps and other places, under widely varying conditions, to obtain definite information regarding this menace to health. The reports were not pleasant reading. In nearly every investigation, a high percentage of infective bacteria was found, and recommendations were made to health and other authorities that more attention be given to this form of disease prevention. Subsequently, many states and cities passed laws pertain-

ing to the sterilization of drinking utensils and for the regulation of dishwashing. Some attempt at enforcement has been made, but neither inspection nor enforcement has been adequate.

Too few school cafeterias avail themselves of the opportunity for inspection by local boards of health. This is an extremely important service and should be requested at least once each semester. The inspection should include all sanitary provisions for the care and handling of food and



An efficiently installed dishwashing machine showing metal tables with no open seams or corners.



Plates properly placed in the baskets for washing.

especially the method of dishwashing. That such dishes as cups, glasses and silverware may spread infection is obvious. The procedure followed in washing these dishes determines to a large extent the number of bacteria they carry, and they are less likely to be sterilized in the process than other dishes. Carelessness from two sources may explain this point, and both are widely practiced.

First, cups, glasses, spoons and forks carrying food into the mouth usually have no particles of food adhering to them; consequently, they are frequently dipped in water, or otherwise lightly washed and dried, with no thought of sterilization temperatures. Since bacteria are not visible they are left unmolested to go into the mouth of the next victim.

Second, these articles may have been well washed, but the workers are not taught to pick up cups and glasses without touching the rims, and to pick up silver by the handles without touching the tines of the forks or bowls of spoons. Cups and glasses are generally inverted in baskets for washing, and may easily be picked up by the handles or bottoms and placed on a tray or a table without touching the tops; and the habit of properly handling silver, when once established, is as readily followed as is the haphazard method. Then, all too frequently, speed is demanded rather than cleanliness.

Dishes washed carefully by mechanical means, that is, with wash water properly charged with a cleansing powder at a temperature not less

than 175° F., and rinsed in water kept at least the same temperature, will remove most organisms. Modern dishwashing machines are constructed with thought for sanitation and for reducing time and labor. Practically all standard types are built of good material and with good lines, with automatic control of both washing and rinsing water, and other devices for easy operation. Connections and joints are tightly fitted, and the metal tables have rolled edges with no open corners or crevices in which dirt or vermin may accumulate. Processes differ in the various models, but in all of them the dishes may be thoroughly cleansed and partially sterilized. Pathogenic organisms may not be destroyed unless special precautions are taken.

In sections of the country in which hard water only is available, dishwashing powders properly prepared to overcome these conditions may be used. Recommendations of reliable manufacturers of dishwashing products who have made a thorough study of the water conditions in each community may well be followed.

The amount of cleansing agent used will vary with the salts in each community, and the manager should make careful tests to determine the quantity which is sufficient for cleansing processes but which leaves the dishes clean and clear. It is essential that the operator does not add an excess of the powder. Powder manufacturers are now supplying powder containers designed to dispense into the wash water the correct amount in proportion to the incoming clear water and grease from dishes.

The rinsing water should never be below the temperature of 175° F. The sprays should be of sufficient force and strike the dishes from enough different angles to reach every surface and penetrate every corner of each dish. If dishes are washed thoroughly in a correctly blended solution, and rinsed in clean water at boiling temperature, they will dry without wiping. Time and labor are saved, and the possibility of contamination is reduced. Wiping with a

towel that has been used for too many dishes, or that has been used for other purposes, or with one that has not been kept clean between usings may make the dishes less clean than before being washed. When the water is very hard, however, especially if the rinsing water has not been neutralized, glasses will not look clear unless wiped, and other dishes may feel sticky or unclean.

During an epidemic of colds or in-

fectious diseases, children affected should be taught to put their soiled dishes in a separate place in order that special care may be given to their sterilizing by boiling.

The dishwashing machine itself needs constant care to prevent accumulations of grease and food waste. It should be washed daily in a strong cleansing solution and the tank for wash water should be thoroughly cleansed after each meal.

Green Glass Plates Boost Sales

By MARY FARNAM

E and designs in green glass plates were assembled before deciding on the salad plates that are now used in the twelve Cleveland Heights school cafeterias. All were approximately 7 inches in over-all measurement, and within a price range of \$0.60 to \$1.00

A series of tests was made on the plates to determine their resistance to washing, both by hand and in the dishwasher along with the rest of the glassware, and also to determine the ease of stacking and placing in the dishwashing rack. After these tests only five plates remained, the other three being broken or cracked.

Next the edge of the dishes, the type of pattern and the way it was applied, were considered. The two with scalloped and irregular edges and an irregular or rough-edged pattern were discarded because of difficulty in keeping them clean and because of the possibility of chipping if they were knocked against other dishes on a tray. Of the three remaining, two were selected that had a smooth raised pattern, which was really part of the dish itself, in preference to an etched or pressed design.

Finally a variety of salads of exactly the same size were placed on the plates to determine the appearance of the standard sized portion and the effect of the color of the plate on the salad itself, its general appearance on the serving counter and its relation to other dishes on a tray containing a typical selection of other foods.

The plate finally selected is a soft green color with a pattern of lines radiating from the center of the plate, which seems to make the salad portion appear larger than it really is. This plate costs \$0.70 a dozen.

The selection seems to have been a good one, for figures show that although the plates have been in daily use for more than a year, two schools have had no breakage, two schools have broken only one, and four schools have a breakage of only four plates. The remaining four schools (the high school, two junior highs and one elementary) have breakages from 10 to 25 per cent, which is remarkable for any glass dish in a school cafeteria.

The other outstanding result, the one regarded as most significant, was the immediate increase in the number of salads sold in all the schools as soon as these green glass plates were introduced into the service. In the number of salads sold daily, the high school cafeteria showed an increase of 50 per cent, two junior high schools an increase of 100 per cent, one junior high school an increase of 25 per cent, and the elementary schools an increase of from 14 to 25 per cent.

Ten Cent Lunches

By Doris H. Zumsteg

Clam chowder or cocoa (8 oz.) Fillet of bluefish (3½ oz.) with tomato sauce Mashed potatoes (No. 10 scoop) Coleslaw (No. 20 scoop) Bread and butter (1 slice w.w. or rye) Raw fruit

Corn chowder or cocoa Sweet potato Baked Virginia ham Carrot relish

Bread and-butter App¹esauce

Tomato soup or cocoa Creamed asparagus on toast (No. 8) 2 slices bacon or chopped egg Mashed potatoes Carrot salad Bread and butter Raw fruit

Vegetable soup or cocoa Chili con carne (No. 10) with kidney beans Coleslaw 1/2 raw tomato Bread and butter Crushed pineapple

Pea soup or cocoa Veal goulash (No. 8 scoop) Mashed potatoes Pickled beets Bread and butter Stewed prunes

Cream of potato soup or cocoa Liver and bacon Mashed potatoes Carrot salad Bread and butter Raw fruit

Cream of potato soup or cocoa Roast lamb Mashed potatoes String bean salad Raw fruit Bread and butter

Lentil soup or cocoa Chicken à la King on toast (No. 8 scoop) Mashed potatoes Cranberry jelly Bread and butter Raw fruit

Bean soup or cocoa Vegetable plate (No. 10 scoop) Spinach Potatoes Buttered beets Carrot relish Bacon, 1 slice Bread and butter Raw fruit

Clam chowder or cocoa Salmon wiggle (No. 8 scoop) Spaghetti Coleslaw Bread and butter

Note: ½ pint of milk is substituted for the soup or cocoa for warm weather menus. Soup and milk were originally on the warm weather luncheon, but the children refused the soup.

NEWS IN REVIEW

The Month

The month of June has seen "education moving forward" on many fronts. At Portland, Ore., on June 28, the National Education Association convenes for its annual session, with the phrase quoted as its theme. Following the concluding business session on July 2, delegates will disperse for such a summer of advanced study and domestic and foreign travel as has seldom been equaled.

A number of universities have already exceeded all previous records for registration at the early summer term. Eastern and Middle Western summer schools report new post-depression highs, while Western institutions of learning will profit by an influx of teachers and administrators following the N. E. A. convention.

Early June saw the high schools and colleges graduating their seniors, with commencement oratory from thousands of platforms striking a slightly more optimistic note than a year ago. A recent survey of colleges and universities, summarized on page 64, shows that business and industry have gone to the campuses for more recruits than they have any spring since 1929.

SUMMER COURSES

Progressive Education

A course in experimental schools, to include a tour of European educational institutions, is being offered at the summer session of Northwestern University, under Dr. Carleton Washburne, superintendent of schools at Winnetka, Ill., and originator of the Winnetka plan.

Field Trip Through New York

The historic, scenic, scientific and industrial centers of New York State are to be the objects of a field trip conducted by the Oneonta State Normal School. The itinerary will include stops for the observation and study of interesting geological formations, historic monuments and agricultural and industrial projects. Two or three semester hours' credit may be earned on this trip by readings, reports and satisfactory participation. The trip will extend from August 15 to 26.

Landscaping

Tenth in a series of courses for janitors and custodians were the summer schools held in Wichita and Topeka, Kan., in early June. This year for the first time the janitor-engineers considered the landscaping of school grounds.

Course for Custodians

A six-day course for school custodians was offered at the University of Nebraska during June on the care, operation and maintenance of school plants.

Publicity and Art

Two courses announced by Boston University for its summer session, July 6 to August 15, are somewhat unusual. One, a course in educational publicity, is designed especially for administrators and teachers called upon to direct publicity for schools and colleges. Eleanor R. Mosely, director of publicity for Boston University, is in charge. Helen Blair, a young sculptor and painter, will teach a course in creative art, planned to help grade teachers who are often called on to carry out art projects for which they are not qualified. The course is also open to art teachers.

Country Life

How adequate is Midwestern philosophy; Midwestern education? How sound are the political and economic ideas that are gaining ground in the Middle West? What are the limitations of its social and cultural life?

These questions were pondered aloud at the second annual Country Life Institute held at Iowa State College, June 22 to 24. To bring out the details and provide a background for discussion, J. E. Foster, dean of summer quarters, introduced such personages as George S. Counts, Toyohiko Kagawa, Edwin F. Nourse, Zona Gale, Mary Swartz Rose, Rudolph Ganz, T. V. Smith and Prof. George S. Wehrwein. One hundred fifty leaders of Midwestern rural life served as association leaders of these conferences.

INSTRUCTION

Civics Training

Seventy per cent of the school superintendents in New York State are dissatisfied with the training they are giving their pupils in civics, they have told the National Self Government Committee, a fact-finding organization which believes that lax and corrupt government is caused by ignorance on the part of the voters. Only 19 per cent of the administrators are satisfied with their civics courses, the other 11 per cent being partially satisfied.

Future Drivers

The Delaware Safety Council has said "Thank You" to the Pontiac Motor Car Company for its recent gift of a fleet of eight new automobiles. These motor cars will be used as demonstrators in teaching high school boys and girls of that state how to drive safely. The open road will be the classroom. Textbooks are "Good Driving" and "Man and the Motor Car."

Timely Warning

Before they file from their classrooms at noon or in the afternoon, pupils of the Haydenville, Ohio, school are given short safety warnings by their principal, Arthur Woods, through the school's public address system.

PERSONNEL

Successful Year

Using conservative rather than radical methods, the Hamilton Classroom Teachers' Association, Hamilton, Ohio, during the last year has made group insurance available for its members, formed a credit union and been a party to the establishment of a policy of five days' sick leave with pay and a 5 per cent increase in teachers' salaries.

Wholesale Dismissals

The wholesale dismissal of forty-one school teachers at Hanover Township, Luzerne County, Pa., brought a request from the state department of public instruction to the state police, asking an investigation of reports that unethical, if not unlawful, tactics were being practiced by the board.

Reports being investigated are: that political intimidation is used by the board; that schools are closed on both primary and general election days and teachers ordered to man the polls and make house to house canvasses for the slate approved by the board; that in consideration of the teachers' active support of a particular slate of directors, the board promised to refrain from a blanket termination of teachers' contracts, and that teachers who lacked political influence were dismissed. An injunction, restraining the school board from appointing successors to the fortyone dismissed teachers, has been granted.

Reaction

After having dismissed them in protest against the tenure act, the board of education of Ventura, Calif., rehired D. R. Henry, junior college president,

IN POLANO



General Julian Stachiewicza School

One of ten buildings constructed in Warsaw in 1935 to accommodate 24,000 children.

Wherever education is most advanced, there the inhabitants are best able to get greater comfort from their labors and nature's resources.



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and M. E. Mushlitz, junior high school principal, thus establishing their permanence. The move was made as a step in the reorganization of the two school systems, and the board emphasized the fact that it had no intention of making teachers permanent. J. H. Pendleton, principal of the evening high school and vice principal of the junior high school, also received a dismissal notice, but it is believed that he is already permanent, and a decision on his status is awaited from the district attorney.

BUILDINGS

Modern Architecture

Glass bricks are going to college. The engineering school at the University of Kentucky, Lexington, which is beginning construction of a new two-story unit to contain a civil engineering laboratory, and a large study hall, has veered sharply from the style of the older buildings on the campus, and is including glass bricks and the latest in lighting and ventilation in its plans.

Firel Fire!

Twelve hundred pupils filed out of the Williston Industrial High School, Wilmington, N. C., recently when fire was discovered in its south wing. Half an hour later the rear walls of both north and south wings collapsed and were followed almost immediately by the front walls. After the pupils had been led from the building, the principal and four teachers returned to the building to check all rooms, ascertaining that all the pupils were out. They found a girl in the chemistry laboratory, completing an experiment, and a boy in the basement, attempting to save his bicycle. The school, which was built only five years ago, was covered with insurance to almost its full loss, \$165,000.

To the Rescue

Ansonia High School shall not, after all, be bereft of a cornerstone. Though the building commission for the school board at Ansonia, Conn., failed to include this mainstay of ceremonies in its specifications in an effort to save money, the president of the construction company that received the general contract has volunteered to donate the stone.

Lightning Strikes

Handicapped by lack of water, firemen could do little to check the flames that destroyed the Bristol County Agricultural School, Dighton, Mass., after it had been struck by lightning. The main administration building, destroyed at a \$100,000 loss, housed an auditorium, classrooms, chemical laboratories and

stock rooms. The flames also destroyed a valuable collection of stuffed birds, presented to the school by A. Cleveland Bent, who gave a similar collection to Harvard University. The school was founded in 1913, and is financed by the county and state. It is open to boys over fourteen years of age who want to learn market gardening, fruit growing, or such. In one year the school raised \$40,000 worth of produce; more than 50 acres have been tilled.

Glass Front

The new Coburn Country Day School on Normandy Island, Miami Beach, Fla., has a glass block wall in the stairway section to provide well lighted stairways and corridors and thus reduce accidents from falls.

L. Murray Dixon, the architect, used a glass wall in this section of the build-



ing because these blocks are said to transmit 86.5 per cent of the light falling on their outside surface, without causing glare.

The glass block wall proved to have another virtue when last November 4 a hurricane of a velocity of 130 miles an hour swept this section. The wind caved in the large auditorium windows of the school and ballooned the roof, but the glass wall stood firm, according to Nelson Coburn, president of the school.

Restoration

The old academy on the grounds of the Erasmus Hall High School, New York City, built 150 years ago, is being renovated by PWA workers at a cost of \$75,000. Carried out through studies of a water-color painting of the building as it originally looked, the restoration is planned for completion by fall when the academy's sesquicentennial is to be celebrated. The academy, which Aaron Burr and Alexander Hamilton attended, was later deeded to the city by the Dutch Reformed Church.

After 188 Years

Established in 1748 in a building on its present school site, the Friends School at Wilmington, Del., is this year to construct new buildings on a new 20-acre site, the gift of the heirs of the late William Bancroft. According to the architect, E. William Martin, the new building will be a modified H-shape, one wing being given to the elementary school, the other to the secondary. The offices and the library are to be located in the central portion. The building is to be informal, even residential, in effect. It will accommodate from 350 to 380 pupils. At the present time there are 335 pupils in the school.

Progressive But Not Private

Following a two-year experiment carried on at the South Highlands School, South Highlands, La., a nonprofit corporation was organized to build and conduct a progressive school, to be known as the Shreveport Progressive School, based on the results of the experiment and conducted along the lines of progressive education. Ellsworth Van Slate, Highland Park, Ill., has been chosen principal of the school, which will open next September. According to the board of directors the school will accommodate 120 pupils, from the first to the eighth grade, and will not be private.

Dining Hall for Dummer

Construction of a new dining hall for Governor Dummer Academy is under way. Last year the pupils of the school initiated a campaign to raise money for this purpose, which was then carried on by the trustees assisted by the advisory committee. The new building will contain a dining hall for the entire school, a kitchen completely equipped with electrical furnishings, and necessary serving and storage rooms. The present dining hall will be remodeled for quarters for boys and masters' families.

FINANCE

Valley Forge Plan

"To preserve at one and the same time the advantages of the scholarly resources of a great university and the virtues of the country college," the University of Pennsylvania has announced the Valley Forge Plan.

In 1926 Henry N. Woolman, alumnus and trustee, gave to the university Cressbrook Farm, a tract of 175 acres at Valley Forge. This plan for its devel-



Beautiful corridor installation of Lyon Lockers in Spanish Acres High School, San Antonio, Texas

Check School Plant Capacity by Annual Increase

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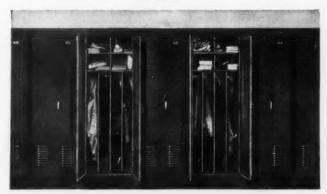


Auditorium seating capacity enlarged by new Lyon Steel Folding Chairs.



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Name		
Address		
City		State

opment, recently announced, is twofold: (1) development of an educational and residential unit at Valley Forge on a modest scale, to conduct with a limited group of students an experiment in teaching and living, and (2) development of this supplementary campus at Valley Forge for the benefit of the whole university, educationally, socially and recreationally.

A freshmen class of fifty men will be admitted. The Valley Forge Plan is one of a number of special projects for which funds will be sought during the university's bicentennial campaign for \$12,500,000. The sum to be raised for this project is \$600,000.

Breaks Precedent

A campaign to raise \$258,000 to be used in restoring its buildings, some of which were built before the Revolution, has been announced by Germantown Academy, Germantown, Pa. This is the first time in the 176 years the school has been in existence that it has appealed to its alumni and the general public for assistance.

Increase to Cut

An increase in teachers' salaries, ranging from \$100 to \$400, was recently voted by the Cleveland board of education. This increase restored the regular salary schedule of all teachers. A general salary cut of 15 per cent was then voted, so that teachers will now receive 85 per cent of their maximum salary.

GIFTS

Trust Fund

A trust fund of \$150,000, the income to be shared by the grade and high schools of Bellflower Township, has been established through the will of the late Marion Flanigon, Bellflower, Ill.

Gift to Lawrenceville

A new system of small group instruction is to be introduced at Lawrence-ville School, Lawrenceville, N. J., through the generosity of Edward S. Harkness of New York. The terms of Mr. Harkness' gift prohibit the amount being made known, but it may be remembered that he gave about \$7,000,000 to Phillips Exeter Academy to permit the introduction of a similar method of instruction.

To St. Paul's

A gift of \$25,000 to the school building fund has been announced by the Rev. Dr. Samuel S. Drury, rector of St. Paul's School, Concord, N. H. This is one of several recent gifts to the school. Under the will of Charles D. Brackinridge \$24,000 is given to the

scholarship fund, also \$12,000 to the same fund by Mr. and Mrs. Arthur W. Butler and an additional \$5,000 for work on the school grounds by Charles Engelhardt.

\$27,000 to Flood Relief

Contributions amounting to more than \$27,000 went from the teachers and administrative officers of the Pittsburgh school system, through the Pittsburgh Teachers Association, to the American Red Cross for flood relief.

Two Universities

At the University of Michigan commencement on June 20, President Alexander G. Ruthven announced a gift to the university of \$1,000,000 from Mrs. Mary A. Rackham of Detroit for research in "human adjustment." Cornell University has received an anonymous gift of \$110,000 to be used without restrictions, and also \$1,000 from the Proctor and Gamble Company for a chemistry fellowship.

MEETINGS

Silver Jubilee

Preliminary plans for the silver anniversary convention of the National Association of Public School Business Officials to be held in St. Louis, October 12 to 16, bear promise of establishing a new record for that organization. According to H. W. Cramblet, secretary, such subjects will be discussed as finance and accounts, building construction, plant operation, plant maintenance, cafeterias and salary schedules. Arrangements are being made for nationally known speakers; lectures, papers and round table discussions on practical phases of school business management will feature the meeting.

Food Service Program

The program being prepared for the Food Service Directors' Conference to be held next October at New York City centers around "The Place of the Lunchroom in the High School Curriculum." Preliminary plans call for the presence of Dr. Harold G. Campbell, superintendent of schools, New York City, and Dr. John H. Roberts, associate superintendent in charge of junior and senior high schools, who will welcome the guests.

Certain phases of the problem of feeding indigent children will be discussed by George H. Chatfield, director of attendance in the Bureau of Child Welfare. Mary Hammersbaugh, superintendent of school lunchrooms in Ohio, will describe how the Cleveland depart-

ment operates and the philosophy underlying its operation.

Another important subject will be the nutritive requirements of school children. This will be discussed by Dr. Mary Swartz Rose, Teachers College, Columbia University. Numerous round tables will be included on labor, salaries, wages, job analysis and dietetics, and problems in meeting racial menus for Italian and Jewish children. Grace Helen Miller is local chairman.

PUBLICATIONS

About Newark's Schools

The Newarker, a bulletin for the celebration of the 100th anniversary of the incorporation of the city of Newark, N. J., devoted its June 1 issue to the school system. Among the articles in this special issue is "Higher Education in Newark," by Madison C. Bates, Newark University; "Newark Goes to School," a chronological history of the school system beginning with an item referring to a "Competent Number of Schollars and Accommodations for a School Master" in 1676; "The Parochial School System," a history, and "School Life of a Newarker of 1856," by Henry V. Rankin.

New Publication

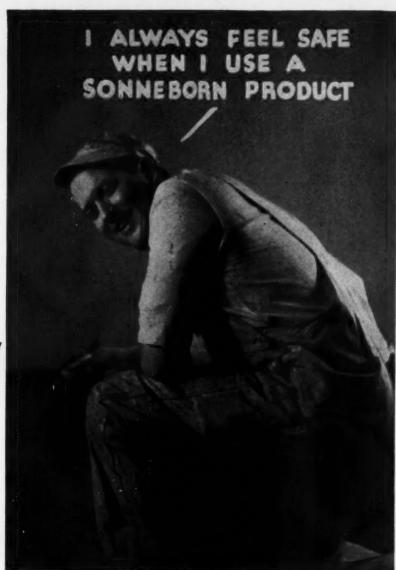
California Review of Adult Education is a new quarterly, issued by the California State Department of Education in cooperation with the California Association for Adult Education. Initial funds for its publication were provided by the Carnegie Corporation of New York through the American Association for Adult Education. The review is intended to serve as a clearing house for all activities in the field of adult education operating within the state. It will publish articles and news concerning programs and projects in libraries, clubs, churches, professional organizations, forums and discussion groups as well as in schools, colleges and universities.

LEGISLATION

In Louisiana

The employment of Louisiana's 12,000 teachers will be removed from the jurisdiction of state officials, where it was placed by the late Huey Long, and returned to the employment authority of the parish school boards if a bill recently introduced into the legislature is passed. This bill seeks to amend the so-called "Teacher Act" passed at a 1935 special session to eliminate the portion giving the state budget commit-

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tee arbitrary authority over teacher em-

Another school bill introduced seeks to provide a teachers' retirement fund to permit pensions after voluntary retirement at 65 and mandatory retirement at 70 years of age. The fund would be equal, according to specifications in the bill, to 9 per cent of the state teacher pay roll, $4\frac{1}{2}$ per cent to be contributed by the teachers and $4\frac{1}{2}$ per cent by the state.

OCCUPATIONS

Jobs for Graduates

More graduates have been recruited by business and industry from the class of 1936 than from any class since 1929, and at salaries that have increased from 10 to 25 per cent over those offered graduates a year ago, according to a survey recently completed by Investors Syndicate. Business administration and engineering graduates are more in demand than other graduates, generally speaking. Columbia University reports that the demand for its graduates is 600 per cent over any recent year. The University of Illinois states that the demand for graduates in business exceeds the supply of competent men. The University of Michigan reports employment from its campus as almost double.

Foremanship Conferences

The state board of control for vocational education in Michigan recently approved a plan to conduct foremanship conferences at Wayne University, Detroit. This program will cost \$4,500 a year and will be supported by federal trade and industrial teacher-training funds.

After High School

A survey of Denver high school graduates has been made by the bureau of business and social research, school of commerce, University of Denver. Among other things it found these five:

 Out of the 5,010 graduated in the classes in 1929, 1933 and 1934, nearly 40 per cent entered college.

Of the 5,010 graduates as of April
 1, 1935, about 2,000 are gainfully employed.

3. Of the 1929 graduating classes, 24 per cent of the boys and 38 per cent of the girls are married.

4. The chief recreational interests are baseball, tennis and golf.

In property holdings, the automobile stands at the head of the list for boys. In general, the radio ranks second for both boys and girls.

VISUAL EDUCATION

Survey Completed

What some 16,500,000 American school children are provided with in the way of visual instruction aids has been determined by the U. S. Office of Education in a national survey of elementary and secondary schools.

Here are some of the statistics gathered in the study begun January 1, 1936, which were released for the first time at the National Conference on Visual Education held in Chicago, June 22 to 25. C. M. Koon presented them.

23. C. M. Koon presented them.	
Number of school systems	
covered 10,00)(
Number of pupils16,472,60)2
Number of school buildings. 81,44	
Number of buildings equipped	
with electricity 41,23	31
Lantern slide projectors 16,86	50
Lantern slides in use 3,362,00	X
Rolls of stillfilms and film-	
strips 74,00)(
Stereographs 1,334,00)(
Motion picture cameras	
owned by schools 57	75
Motion picture projectors	
owned by schools	
16 mm. silent 5,97	19
16 mm. sound 45	55
35 mm. silent 3,13	33
35 mm. sound 29	
	-

The survey covers 95 per cent of all schools in cities of 5,000 or more population. It has been conducted under a grant from the American Council on Education. Two-thirds of the school systems make some use of motion pictures and radio programs in their teaching.

Motion pictures are used more extensively in teaching science than in any other subject. Geography and travel rank next; other high ranking subjects are history and the social studies.

Traveling Movie Man

A young man down in Tennessee could not get a teaching job last year so he traveled with a motion picture projector and some teaching films in his own section of the state. His income for the year exceeded what his salary as a teacher would have been, and a number of schools had visual instruction of this type that could not otherwise have financed it.

Projector vs. Microscope

A school that has several microscopes will have only one motion picture projector. A. B. Roberts, principal of Haw Creek Township High School, Gilson, Ill., says that in his five-teacher school oftentimes three teachers want the movie projector at the same period. He would like to have at least as many projectors as microscopes for he regards them as of more importance in teaching.

Films for the School Screen

XI-Switzerland

Little Swiss Wood Carver—Wood carver's son learns to carve while tending his goats in the mountains; Alpine scenery, native life, customs and industries; story of William Tell introduced. 1 reel. 16 and 35 mm., silent. For rent or purchase. Films of Commerce Co., Inc., 35 West 46th Street, New York City.

With the Swiss Boy in the Alps—Hay making, tending poultry, and making cheese; reconstructing a bridge; guarding and repairing rock channels; cutting and transporting wood; storing winter supplies; transporting mail and food by mule, and sweeping bridge roads. 1 reel. 35 mm., silent. For rent or purchase. International Educational Pictures, Inc., 40 Mount Vernon Street, Boston.

The Lake of Lucerne—Glimpses of tunneled Axenstrasse; Chapel of William Tell; quaint ports; lovely bits of Switzerland. ¹/₄ reel. 16 mm., silent. For rent or purchase. Burton Holmes Films, Inc., 7510 N. Ashland Avenue, Chicago. People Who Live in the Mountains—Contrasting American home environment with that of another country, i.e. Switzerland, showing the effect of a mountain environment from the economic and human standpoint. 1 reel. 16 mm., silent. For rent or purchase. Pinkney Film Service, 1028 Forbes Street, Pittsburgh, Pa.

Village Life in Switzerland—Scenes of hidden mountain towns and of some bordering the Swiss lakes. 1 reel. 16 mm., silent. For rent or purchase. Edited Pictures System, Inc., 330 West 42d Street, New York City.

Touring Switzerland—Touring Switzerland by boat, railway and tunnels. 1 reel. 16 mm., silent. For rent or purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

Roof of Europe—Geneva—League of Nations and historical sections; milk products and Swiss cheese industries; winter sports. 1 reel. 16 and 35 mm., sound. For rent or purchase. Bray Pictures Corporation, 729 Seventh Avenue, New York City.

Try It?

Of Course You Can! Summer is just the time!

Even though hundreds of schools throughout the country are using the Finnell—and saving money—you should not and you need not install any floor machine without giving it a thorough trial. Vacation time is an excellent time to test the possibilities of a Finnell.

Arrange now to have a demonstration of the new 100 series Finnell. We sincerely believe it the finest floor machine available. It is the result of three decades of floor manufacturing

experience.

But judge for yourself. See what it will do on your floor under actual working conditions. Just drop us a line and say "We want the right floor machine for our needs. Perhaps it is the Finnell. May we have a demonstration to help us decide?"

For the Right Floor Finish Choose GLOSS SEAL

Summer is just the time also to refinish your floors. Finnell offers a line of fillers and sealers to meet every need. For a hard, clear lustre, that will stand strenuous school wear, use Gloss Seal No. 7,-or perhaps Gloss Seal No. 1 which gives a little more surface film and is ideal for gym floors. Gloss Seal No. 9 is more penetrating. Traffic Seal puts lasting protection deep down into the wood. Fulfil or Terrazzo-

Fil are fillers each meeting a specific need. The Finnell line is complete—and you can have free the service of consultation with one of our nation-wide staff.

Just printed! New and up-to-date description and specification sheets on all Finnell Products. Write us, telling whether you are interested in machines, floor finishes, or waxes or all three, and copies will be sent promptly. Address FINNELL SYSTEM, Inc., 207 East



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For 12 years we have manufactured and experimented with casein paint. Texolite is the successful result of our experimentation. Texolite is an entirely new principle paint. Its advent marks a new conception of paint beauty, paint value, and paint performance.

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1. Hides in one coat . . . 2. Dries in one hour . . . 3. Goes 25 per cent farther . . . 4. Leaves no brush marks . . . 5. No paint odors . . . 6. Does not yellow . . . 7. One gallon makes one and one-half gallons of ready-to-use paint.

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Please send me a sample full quart can of Texolite Paint, together

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Weatherwood Insulating Board Weatherwood Hardboards USG Fiber Wallboards USG Acoustical Tiles

UNITED STATES GYPSUM COMPANY

Passes to the Movies

Passes to the movies should be granted to teachers, in the opinion of C. M. Koon, senior specialist in radio and visual education of the U.S. Office of Education. In the recent school survey, it was found that in 80 per cent of all the schools pupil attendance at certain commercial movies is recommended.

Bibliography

A bibliography on visual education has been compiled by the committee on visual education of the Middlesex County Supervising Principals' Association. The period of time that is covered by the publication is from January 1928 through March 1936, and includes some 1,400 items with an index of periodicals and a directory of publishers. It may be obtained from Arthur M. Judd, supervising principal, North Brunswick Township Schools, Middlesex County, New Brunswick, N. J., for \$2.50.

ANNIVERSARIES

Aged Fifty

The National College of Education, Evanston, Ill., recently celebrated the fiftieth anniversary of its founding. Of its last year's graduating class those who wanted teaching positions are 100 per cent placed, reports President Edna Dean Baker. The student body for the academic year numbers 360; summer session enrollment averages more than 300 students.

Selected Reunions

New York City principals and teachers were given a day off, with pay, to receive degrees from colleges and universities, to attend the graduations of their own children or to attend college class day exercises for their 25th, 30th, 35th, 40th, 45th and 50th reunions.

Marker

To the picturesque old gray stone walls of Geneva Hall, original building at Hobart College, Geneva, N. Y., a tablet was recently affixed. It reads:

Geneva Hall 1821

Erected by the Citizens of Geneva to make Geneva Academy a College; the site was chosen by Bishop Hobart. Here in 1824 was first introduced in an English-speaking college, a Course without Classics to prepare Youth for the practical business of learning life. "The earliest College Building in Western New York, it has a notable place in the Beginnings of Modern Higher Education. This tablet is the gift of the Druid Society, 1936."

It was in 1824 that the Hobart

founders announced that they would institute "besides the regular course of study pursued in similar institutions, a totally distinct course, in direct reference to the practical business of life, by which the Agriculturist, the Merchant and the Mechanic may receive a practical knowledge of what genius and experience have discovered, without passing through a tedious course of Classical Studies."

Tercentenary

In concluding the formal ceremonies that are scheduled to celebrate the three hundredth anniversary of the founding of Harvard University and the establishment of higher learning in America, sixty-six leading scholars and scientific men will be awarded honorary degrees on September 18. Fourteen of those to be honored are from the United States, twelve from England, ten from Germany, six from France, five from Switzerland, three from Italy, two each from Japan, Denmark, Scotland, Sweden, and one each from the Netherlands, Argentina, Norway, Canada, Czechoslovakia, Austria, China and Australia.

The degrees will be presented in an open air theater in Harvard College Yard. More than 10,000 Harvard alumni and students are expected to attend the tercentenary celebration, as well as distinguished leaders of the church, the professions, finance and industry. Delegates from universities and learned societies will pay tribute to the advancement of learning in the United States from 1636 to the present.

RADIO

Internal Workings

Kansans are being given a chance to learn what goes on in a college classroom, a college library or when a student visits the dean's office. A series of broadcasts, from twenty to thirty minutes in length, are being presented over KSAC by Kansas State College, under the direction of Prof. Robert W. Conover. Called "College Cross Sections," these programs are being broadcast from the classrooms whenever possible. Lectures, recitations and class discussions are some of the methods being pre-

Funnier

Grade school children in Gary, Ind., wrote compositions on their favorite radio programs. They all liked programs that were "funny." Margaret Southwick, director of English in Gary, thinks humor is the great lack in textbooks as well as certain radio programs otherwise

Popular With Pupils

Pupils at Havelock High School, Lincoln, Neb., list their pet radio programs on the school bulletin board. A committee chosen by the student council makes the selections. It takes recommendations from teachers, radio magazines, daily papers and networks, and on the basis of its members' listening experience, makes a final recommendation for the school. A broadcast con-

On the Air During July

The following programs of particular interest to school people are arranged by the National Broadcasting Company and the Columbia Broadcasting System. The time is Eastern Daylight Saving except when otherwise specified.

Daily

National Farm and Home Hour¹—1:30-2:30 p.m. (NBC-WJZ). Wilderness Road²—5:45-6:00 p.m. (CBS).

Monday

Children's Songs, Stories and Novelties, Dor-othy Gordon—5:15-5:30 p.m. (CBS-WABC). Have You Heard? (Introductions to fascinat-ing corners of natural science)—5:30 p.m. (NBC-WJZ).

Tuesday

Science Service Series, Watson Davis, Editor-4:30-4:45 p.m. (CBS).

Thursday

Radio Guild's Historical Dramas—4:30-5:30 p.m. (NBC-WJZ).
Answer Me This (Self tests in the social sci-Historical Dramas-4:30-5:30

¹Except Sunday. ²Except Saturday and Sunday. ²Also Wednesdays and Fridays.

ences behind the news)-5:30 p.m. (NBC-WEAF).

Friday

Magic of WEAF). of Speech-2:00-3:00 p.m. (NBC-

Saturday

Cincinnati Conservatory of Music—11:00 a.m.-12 m. (CBS). Boston Symphony Orchestra—8:30-9:30 p.m. (NBC-WJZ). Titans of Science-10:00-10:30 p.m. (Mutual).

Sunday

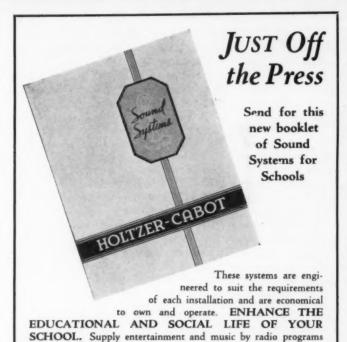
University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).

Speakers and Events in International Field (transatiantic broadcast)—12:45-1:00 p.m. (CBS).

Everybody's Music, with Howard Barlow and the Columbia Symphony Orchestra—3:00-4:00 p.m. (CBS).

Ford Sunday Evening Hour, Victor Kolar, conductor—9:00-10:00 p.m. (CBS).

Sunday Symphony Concerts, 10:00-11:00 p.m. (NBC-WEAF).



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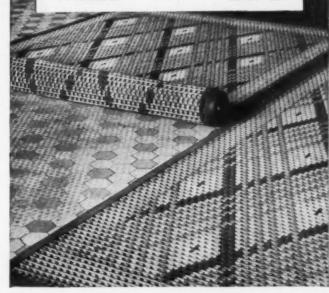
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Also Q.C.f. Fairhurst folding walls. Lock rigidly into place.

May be furnished with blackboards and continuous chalk rail



Fairhurst Wardrobes care for more pupils than do other wardrobes of equal dimensions. All parts subject to stress are amply rugged. In the open position the doors are entirely out of the way at the ends of each compartment. The doors pivot, there are no rollers or wheels, no track or slots on the floor. The operation is simple, smooth, and quiet. The interior arrangement remains unchanged, and aisles and interiors are free from obstructions whether the doors are opened or closed. Sagging of floors does not prevent operation of doors in any way. All wardrobes furnished complete in wood or metal, including hooks and hangers.

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taining advertising of an objectionable sort is taboo.

J. E. Loder, in reporting the school radio service to the News Letter, Ohio State University publication, says that physically handicapped pupils, being faithful radio listeners, make excellent committee members.

Fan Mail

"Mike fright"-not a bit of it. Over a network of several Ohio stations, including the 500,000-watt WLW, high school pupils during the semester just closed participated in radio round tables. They discussed without scripts, and often in the heat of the topic forgot the microphones completely.

I. Keith Tyler of the Ohio School of the Air presented the experimental program under the title "High School Students Talk It Over." The six broadcasts were so stimulating to the pupils and brought such an amount of fan mail from parents that the series will be enlarged next year. Preparation for the half-hour broadcast took the form of two one-hour sessions.

Oldest Educational Station

WHA, Madison, Wis., generally recognized as America's oldest educational broadcasting station, staged its first telephonic broadcast in 1917. It maintained a regular broadcasting schedule as early as the year 1919.

NAMES IN NEWS

New Superintendents

DR. H. H. EELKEMA, superintendent of Proviso Township High School and the public school system of Maywood, Ill., has been appointed superintendent of schools at Duluth, Minn.

JOHN F. BRADY, principal of Everett Junior High School, San Francisco, has been appointed chief deputy superintendent of schools to fill a vacancy from a year ago when ARCHIE CLOUD became president of the San Francisco Junior College. He was appointed by Dr. ED-WIN A. LEE, retiring superintendent, with the concurrence of JOSEPH P. Nourse, incoming superintendent. At the same time JOHN C. McGLADE, deputy superintendent of senior high schools, was named to the new post of deputy superintendent of secondary schools, embracing both junior and senior high schools, an appointment motivated by Mr. Nourse's policy of coordinating both types of schools. WALTER C. NOLAN, deputy superintendent of junior high schools, was made principal of Maine Junior High School. HOWARD McDonald, director of personnel, had his title changed to deputy superintendent of personnel, a shift that raises his salary but moves him into the

ranks of those holding office at the pleasure of the superintendent rather than permanently.

DR. ROLAND B. DANIEL was reelected superintendent of schools at Columbus, Ga., for the twenty-eighth year.

CLAYTON H. BROWN, principal of the Hadley-Luzerne High School, Luzerne, N. Y., has been elected superintendent of schools for the fourth supervisory district to succeed Dr. A. M. Hollis-TER, who declined reelection.

E. W. HOEB, one year from the date of his dismissal as superintendent of schools at Madison, Ill., and under almost the same circumstances, was restored to the superintendency. His dismissal in May, 1935, resulted in a high school strike and the organization of a new political party, which was successful at the last election. A year ago Mr. Hoeb was let go by a four to three vote, the deciding vote being cast by the president of the board to break a tie. This year he was rehired by a four to three vote, the deciding vote being cast by the new president of the board.

Frances Messer was recently elected superintendent of schools for Humboldt County, Iowa, a position held by her late father for twenty-eight years.

ISABEL ECCLES, superintendent of schools at Santa Fe, N. M., for nine years, resigned recently.

MAJOR W. E. QUEENER, formerly an instructor and athletic coach at Georgia Military College, Milledgeville, has been appointed superintendent of schools at

Richland, Ga. LESLIE A. BUTLER, superintendent of schools at Grand Rapids, Mich., since 1924, has announced his resignation to the board of education as of July 1.

GEORGE I. CLAPP, superintendent of schools at Woburn, Mass., recently announced his retirement. Mr. Clapp, who is sixty-seven years of age, and has held that office since 1903, had been expected to continue as superintendent until he reached the compulsory retirement age.

I. H. McKee, who has been superintendent of schools at Newburg, Ia., for four years, decided that he would rather teach than administer a school system and asked to be released from his duties. WILLARD LANGERAK, principal of the high school, has been appointed superintendent to succeed Mr. McKee, and PAUL JOHNSON, athletic coach, has been appointed principal.

GEORGE E. DEMILLE, superintendent of schools at Green Island, N. Y., resigned in order to become a priest in the Episcopal Church. He will enter the General Theological Seminary, New York City, for a final year of study.

S. R. FINIFROCK has been appointed superintendent of schools at Galena, Ill. His recent dismissal as principal of the

Coming Meetings

- July 6-9-American Home Economics Association, Seattle, Wash.
- July 6-11-Conference on Curriculum and Guidance, Stanford University.
- July 6-17—Department of Elementary School Principals, National Education Association, Portland, Ore.
- July 23-25—Annual Three-Day Conference for School Administrators and Guidance Counselors.
- July 28-30—Superintendents' Conference, Pennsylvania State College.
- Sept. 27-29—Council of School Superintendents, Saranac Inn, N. Y.
- Oct. 2-3—Conference of Food Service Di-rectors, Hotel Commodore, New York City.
- Oct. 7-9—New Hampshire State Teachers Association, Littleton. Oct. 8-10-Vermont State Teachers Asso-
- ciation, Burlington. et. 12-16—National Association of Public School Business Officials, St. Louis.
- Oct. 15-17-Wyoming Education Associa-
- tion, Laramie. ct. 22-23-Indiana State Teachers' Association, Indianapolis.
- Oct. 22-24-Mississippi Education Associa-
- tion, Jackson. Oct. 22-24-Rhode Island Institute of In-
- struction, Providence.
 Oct. 23-24—Maryland State Teachers' Association, Baltimore.
 Oct. 29-30—Maine Teachers' Association,
- Oct. 29-31—Montana Education Associa-tion, simultaneous meetings at Helena, Kalispell, Great Falls and Billings.

- Oct. 29-31—Utah Education Association, Salt Lake City.
- Oct. 30-Connecticut State Teachers Association, Hartford.
- Nov. 4-6-North Dakota Education Association, Grand Forks.
- Nov. 5-7-Colorado Education Association. simultaneous meetings at Denver, Pueblo and Grand Junction.
- Nov. 5-7—Iowa State Teachers Association, Des Moines.
- Nov. 5-7-Minnesota Education Association, St. Paul.
- Nov. 6-7—Kansas State Teachers Associa-tion, simultaneous meetings at Topeka, Salina, Hays, Garden City, Hutchinson, Winfield, Coffeyville and Fort Scott.
- Nov. 9, week of—Delaware State Education Association, Wilmington.
- Nov. 11-14-Missouri State Teachers Association, Kansas City.
- Nov. 12-14—Arizona State Education Association, Tucson. Nov. 12-14-West Virginia State Education Association, Huntington.
- Nov. 13-16—New Jersey State Teachers' Association, Atlantic City.
- Nov. 22-25-South Dakota Education Association, Rapid City. Nov. 26-28—Texas State Teachers Association, Fort Worth.
- Dec. 10-12—National Conference on Educa-tional Broadcasting, Washington, D. C.
- Dec. 28-30-Pennsylvania State Teachers Association, Harrisburg.
- Feb. 20-25—Department of Superintendence, National Education Association, New Or-

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All acid proof drain pipe and fittings shall be of ferro-silicon—**CORROSIRON**—or equal to comply with the following analysis:

"All acid waste and acid vent piping shall be of approved high silicon cast iron pipe and fittings of the bell and spigot type. The cast iron for acid waste and vent pipe and fittings shall contain:

"Not less than 14.25% and not more than 15% silicon. Total carbon content below 1.12% and above .50%. Manganese below .50%. Sulphur below .05%.

"High silicon cast iron pipe and fittings for acid waste and acid vent pipe shall be of the thickness, etc., corresponding to extra heavy soil pipe and fittings unless otherwise approved."

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In Medart Lockerobes, "Teacher Control" means more than the mere simultaneous *locking* of all doors (a minor feature as wardrobe doors are rarely locked when in use during the day and under the supervision of the teacher).

Lockerobe "Teacher Control" also provides simultaneous opening and closing of all doors by the operation of one pair of master control doors. Thus noise, confusion, and possibility of injury among pupils from individually operated doors, is avoided. Medart "Teacher Control" of the wardrobe problem is complete.

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Provides Obsolute "Teacher Control"* of the Wardrobe Problem *not only simultaneous locking but also simultaneous opening and

closing

of all doors

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Ideal FOR WOOD, COMPOSITION OR CEMENT FLOORS



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and provide a publicity program for the school

You need some vehicle of expression with which to interpret or to sell your educational program, its objectives and ideals to your community.

A school Printing Department is the answer to this need. It will provide dignified means of generating desirable publicity, produced by the students under school control.

More than this a Printing Department will confer countless educational benefits which supplement and co-ordinate all academic work.

Write for additional information.

Department of Education

AMERICAN TYPE FOUNDERS

ELIZABETH, NEW JERSEY

Types Used: Franklin Gothic Condensed and Schoolbook Family

high school at Leaf River, Ill., precipitated a students' strike.

Among the Colleges

DR. ROSWELL GRAY HAM has been appointed to the presidency of Mount Holyoke College to succeed DR. MARY E. WOOLLEY, who is to retire at the end of the next academic year. Doctor Ham is associate professor of English literature at Yale University.

DR. CARTER DAVIDSON, professor of English at Carleton College, has been made president of Knox College, Galesburg, Ill. Doctor Davidson assumes his new duties July 1, succeeding Dr. Albert Britt, whose resignation becomes effective after eleven years of service.

DR. JAMES JOSEPH WALSH, physician, author and publicist of New York City; PROF. ALBERT EINSTEIN, Princeton; JAMES BRYANT CONANT, president of Harvard University, and WALTER LIPPMANN are to be the speakers at the seventy-second convocation of the University of the State of New York on October 15, commemorating the 300th anniversary of the establishment of higher education in America.

DR. ROBERT C. HORN, dean of Muhlenberg College, has been appointed acting president of that institution to replace DR. JOHN A. W. HAAS, who resigned after thirty-two years in that position.

PAUL SWAIN HAVENS has been made president of Wilson College, Chambersburg, Pa. Mr. Havens succeeds Dr. ETHELBERT D. WARFIELD, who is retiring at the end of the present academic year after twenty-five years of service.

James A. Nuttall, former superintendent of schools of Emery County, Utah, has been appointed president of Snow College, Ephraim, Utah.

New Principals

DR. DONALD E. TOPE, member of the faculty at Iowa Wesleyan College, Mt. Pleasant, has been appointed principal of the Monroe School, Omaha, and assistant professor of observation and practice teaching at the Municipal University of Omaha. Most of the practice teaching done by the university students is organized at the Monroe School.

C. W. Martin of East Alton, Ill., has been elected to the superintendency of schools at Peru, Ill. The vacancy was caused by the death of Supt. A. H. Karn last January.

J. F. HARRIS, principal of the Bradfield Elementary School, Highland Park, Dallas, Tex., has been named principal of the junior high school to be opened in Highland Park in January. H. B. HOWARD, principal of the Armstrong

Elementary School, has been appointed supervising principal of the Armstrong, Bradfield and University Park grade schools. W. T. HERRING will at midterm become superintendent of buildings and grounds and business manager for the district, which contains three grammar schools, a new junior high and a senior high school.

HERBERT H. ARCHIBALD, principal of the high school at Norwood, Mass., has been appointed headmaster of the Watertown Senior High School, Watertown, Conn., to succeed EDWIN H. WHITE-HILL, who resigned in June.

THOMAS W. HOWIE, principal of the school at Selbyville, Del., has been elected to succeed the late WARREN K. YERGER as principal of the Alexis I. Du Pont High School, Wilmington, Del.

HARRY M. McPherson, principal of the Mount Shasta High School, Mount Shasta, Calif., was recently elected principal of the high school at St. Helena, Calif. He succeeds George Creary.

Ross N. Young, principal of Marshall High School, Minneapolis, since it opened in 1924, resigned from that position because of poor health.

VERNER F. ROBINSON, submaster of the South Junior High School, Waltham, Mass., was elected principal to succeed Winthrop N. Crocker, who is retiring. At the same time George Ward was elected submaster of the Senior High School to succeed Charles W. Goodrich, who was recently elected principal of the school.

LLOYD JAMISON is the new principal of the high school at Gove, Kan., where he succeeds K. A. PIPER, who resigned

DEAN LOBAUGH, for three years principal of the high school at Pendleton, Ore., has resigned to accept the principalship of the high school at Walla Walla, Wash. He will be succeeded by Clarence Hines.

ROBERT P. TILLMAN has been elected principal of the Way Consolidated County School, Baxley, Ga., to succeed I. B. Olliff.

CHARLES E. AGNEW, principal of the Harrison Hill School, Fort Wayne, Ind., and a teacher in the Fort Wayne schools for twenty-six years, has announced his resignation.

JOHN Cox, principal of the Halsey High School, Sherwood, Ore., has been elected principal of the newly organized Sherwood Union High School district in Washington County.

JOSEPH C. McLain, chairman of the committee on teacher education and improvement in service for the New York Teachers' Association, has been appointed principal of the high school at Oneonta. He will succeed H. G. VAN DEUSEN, who resigned a year ago. EDNA

M. LAWRENCE has been acting principal in the interim.

CECIL ENGLAND, teacher in the schools at Casa Grande, Ariz., has been named principal of the elementary school.

CEDRIC O. REYNOLDS, member of the faculty of Grafton High School, Grafton, W. Va., has been appointed principal of Bunker Hill High School, Bunker Hill, W. Va., to succeed Roy E. Boone, who resigned to accept the principalship of the high school at Ronceverte, W. Va.

CHARLES W. HAMILTON, principal of Hamilton Junior High School, Elizabeth, N. J., has been made assistant in secondary education in the state department to replace LOUIS A. RICE.

JOHN MELVILLE COTTON, headmaster of the high school at Walpole, N. H., has been appointed to a similar post at the high school at Whitefield.

W. L. SWAIDNER, principal of the Donnell Junior High School, Findlay, Ohio, has accepted the office of principal of the Van Cleve High School, Troy, Ohio.

CHARLES D. JOHNSON, principal at Madill, Okla., resigned from that position to accept a principalship at Pauls Valley. SAM O. Pool, principal of the school at Haileyville, Okla., will succeed Mr. Johnson at Madill.

With the Government

DR. LEONARD POWER, special consultant to the United States Office of Education, has been appointed second vice president of the National Advisory Council on School Building Problems, succeeding DR. FRANK PIERREPONT GRAVES, who has retired.

Prof. George L. Maxwell, Colorado director of adult education, has been appointed assistant director of the educational division, WPA. Professor Maxwell has been connected with the department of education at the University of Denver since 1929. He was first granted a leave of absence to conduct the FERA adult education program.

Honored

DR. FRANK E. SPAULDING, first chairman of the department of education, Yale Graduate School, was recently honored by twenty-two of his colleagues who presented him with a volume of essays written as a testimonial to him by his former associates in various parts of the United States. The presentation was made by DR. PAUL WEBB, assistant superintendent of schools at Los Angeles, at a dinner given in Doctor Spaulding's honor. Among the contributors are Samuel M. Brownell, superintendent of schools, Grosse Pointe, Mich.; NICHOLAS MOSELEY, superin-



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ASSET



After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

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tendent of schools, Meriden, Conn., and William H. Holmes, superintendent of schools, Mount Vernon, N. Y.

DR. FRANK C. TOUTON, vice president and director of the educational program of the University of Southern California, died from apoplexy on June 1 at his Beverly Hills home. Doctor Touton, who was fifty-five years old, was recently presented the award, "Officer of Public Instruction," by the French government for outstanding service in the field of education.

DANIEL B. HOFFMAN, superintendent of schools at East Moline, Ill., for thirty years, has had the new \$160,000 grade school named after him.

Travelers

F. R. HARRIS, superintendent of schools at Greenfield, Ohio, will embark July 15 on the zeppelin Hindenburg for a round trip to Frankfort, Germany, whence he will go to Berlin for the Olympic games.

On the Queen Mary's first west-toeast crossing were Col. A. M. Hitch, head of Kemper Military School, Boonville, Mo., and Mrs. Hitch. They will return around August 1.

Private School Personnel

James S. Guernsey, headmaster of the Morgan School, Clinton, Conn., has been appointed head of the Shattuck School, Faribault, Minn., to succeed Dr. C. W. Newhall. Mr. Guernsey was at one time a master in Latin and history at the Fessenden School for Boys, Boston, and later became headmaster of Taft School.

ALBERT E. ROGERS, associate principal of the Sidwell Friends School, Washington, D. C., has been appointed headmaster to succeed Thomas W. Sidwell, founder of the school, who died recently. Mr. Rogers, who taught at the William Penn Charter School, Philadelphia, and the Friends School, Moorestown, N. J., is the author of several articles on exploratory courses in the junior high school and a member of the Quaker Headmasters' Association, the Philadelphia Classical Society and the Federal Schoolmen's Club.

HAROLD CRUIKSHANK, formerly instructor at Spring Hill School, Litchfield, Conn., has been appointed headmaster of the Romford School, Washington, Conn., to succeed his brother, Paul, who recently went to the Taft School as headmaster.

ARTHUR MILLIKEN, senior master at Brooks School, Andover, Mass., has been elected headmaster of Westminster School, Simsbury, Conn., to succeed R. R. McOrmond. Mr. Milliken taught

at Groton before the founding of Brooks School, and went there to teach when it was organized in 1927.

PHILIP S. SAYLES, principal of the high school at Adams, Mass., has been appointed headmaster of Gould Academy, Bethel, Me. His appointment was announced during a program observing the 100th anniversary of the founding of the academy.

DR. PAUL B. JACOBSON, director of secondary education at Hibbing, Minn., has been appointed principal of the University High School of the University of Chicago, assistant dean of the college and assistant professor of education. He succeeds DR. ARTHUR K. LOOMIS.

MRS. DELLA SIMPSON, a member of the faculty at the Mary C. Wheeler School, Providence, R. I., has been named head mistress of Columbia Preparatory School, Rochester, N. Y., recently combined with Allendale School.

Deaths

ARNOLD BENNETT HALL, director of government research for Brookings Institution, Washington, D. C., since January, 1933, died at the age of fifty-five after a long illness. Mr. Hall, who had taught at the University of Chicago, Northwestern University and the University of Wisconsin, was president of the University of Oregon for six years before joining Brookings' staff.

FRANK S. HARTSFIELD, superintendent of public schools in Leon County, Florida, for nineteen years, died after a brief illness. He was a past president of the Florida Education Association.

MRS. EDITH MACFARLANE BRAGGA, principal of the Rockaway High School, Rockaway, N. J., for eighteen years, died suddenly at her home following a heart attack. Mrs. Bragga, who began her service in the school system at Rockaway by teaching in the Washington Grade School, was made principal of the high school when it was established in 1918.

A. E. FISHER, former superintendent of schools at Wymore, Aurora and Broken Bow, Neb., and a past president of the Nebraska Schoolmasters Club, died recently. Mr. Fisher left Wymore in 1934, taught one year in Iowa and then retired.

EDWARD H. HYNES, assistant superintendent of New Orleans schools since 1918, and for forty-one years a member of the school system there, died recently.

Arnold Weik, superintendent of schools at Glendive, Mont., died at the age of thirty-six years.

CHARLES BERTRAM NEWTON, headmaster of Pingry School, Elizabeth, N. J., died at the age of 64 years. E. LAURENCE SPRINGER will succeed him.

Miscellaneous

DR. GEORGE A. WORKS of the University of Chicago has been employed by the Philadelphia board of education to conduct a survey of Philadelphia schools beginning in September.

DR. SAMUEL ENGLE BURR, superintendent of public schools of New Castle Special School District, New Castle, Del., received his fourth academic degree on June 5, when the University of Cincinnati gave him a doctorate in education.

DR. C. L. HUFFAKER, specialist in school administration at the University of Oregon, school of education, has recently completed a survey of the schools of Klamath Falls dealing with building and school administration problems in that school district.

GEORGE D. FIRMIN, chemistry teacher, and the last of the five men who originally constituted the faculty of Northeast High School, Philadelphia, is retiring this semester, having reached the age of seventy.

A. C. Tagg of Dearborn, Mich., has been named state supervisor of vocational rehabilitation of Michigan, succeeding John J. Lee, who has resigned to become associate professor of special education at Wayne University.

MRS. JOHANNA M. LINDLOF, who retired last February after having taught for thirty-five years, was recently appointed a member of the New York City board of education to succeed Dr. George J. Ryan, a member since 1918, who was not reappointed. Mrs. Lindlof is president of the Kindergarten-6B Teachers' Association she founded.

PAUL LOVELESS, elementary school principal, Scott City, Kan.; CECIL SMITH, Junior College, Garden City, Kan.; R. C. HUNT, Junior College, Dodge City, Kan., and Eva King, elementary school supervisor, Chanute, Kan., have been selected to serve on the committee at George Peabody College that will outline this summer study materials for the curriculum project in their state next fall.

R. H. RICHARDS, principal of Ensign School, Huntington, W. Va., was recently elected president of the West Virginia Elementary Principals Association.

GARLAND M. TAYLOR, superintendent of schools at St. Cloud, Minn., is the new president of the County Superintendents of Schools of Minnesota, defeating a man who has held this office for thirty-two years.

Frank Hankinson, assistant superintendent in charge of elementary schools of Staten Island, New York City, will retire at the end of this term, having reached the mandatory retirement age of seventy.





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NOTES FOR BUYERS · · ·

Ides of January

The right time to eat oysters, Brother, is the wrong time to install boilers. July and August are the months when you should get steamed up over school heating. If you wait for the months that have "r" in them, boilers may get you bothered but they won't get you hot.

Recommended reading for those with boiler troubles is the new Catalogue 84 of Type C boilers, Kewanee Boiler Corporation, Kewanee, Ill. For the first time the catalogue shows these boilers conforming with the Industry Simplified Practice Recommendation. These boilers are for coal hand-firing or stoker firing and for oil and gas. All have the Kewanee's crowning glory, the corrugated crown sheet, said to be one of the outstanding accomplishments of the past decade in steel boiler building.

The ides of January remember.

Always a Colt

We had promised ourselves not to mention dishwashing machines for several months, but along comes a centenary. Not of dishwashing machines, of course, but of the Colt Patent Fire Arms Manufacturing Co., Hartford, Conn.

The one and only 100-year-old Colt has just trotted to market with the Autosan R-16, a small-sized dishwasher ideal for school cafeterias. It is a table type of machine. It sprays the dishes from above as well as from below, throwing 100 gallons of wash solution on to them every minute. Of stainless steel, it is headed by electricity or steam. It really likes to wash dishes.

Beggar's Opera

"How happy would I be with either were t'other dear charmer away" may hold in some instances, but three isn't always a crowd.

The more some of us listen to the radio the fonder we grow of the phonograph. Yet we aren't silly enough to wish the radio out of existence. The schoolroom needs the radio but it is always going to regard the phonograph as a dependable friend.

Electro-Acoustic Products Co., Fort Wayne, Ind., realizes that relations with the phonograph have never been on a friendlier footing. To cement that friendship its Magnavox "Concerto" is introduced, an instrument of beauty in both appearance and tone. Incorporated in it are a new 8-inch speaker, powerful

amplifier, crystal pick-up, self-starting motor and automatic volume control.

At Home at School

At home at school or at home abroad—it's not so easy to feel that way. It depends upon the individual and the furniture. The home touch is being much sought after, of course. Hotels pursue it, and an experienced friend writes us that even the jails have advanced a good way toward coziness.

Following the trend comes a company with a specialty. Universal Equipment Company, Batesville, Ind., has set out to give the home touch to residential schools. For dormitories, cafeterias, libraries and reception rooms, it designs and makes furniture. Its craftsmen build furniture that is comfortable and — no insinuations against your pupils — that will withstand rough usage.

The new company does not go in for classroom furniture, in the belief that plenty of well built school furniture is now available. Its idea is to serve prep schools and colleges and public school libraries, rest rooms and cafeterias. We wish it what it wishes pupils — an at home at school feeling.

Naughty World

A good deed in a naughty world has been done by Curtis Lighting, Inc., 1123 West Jackson Blvd., Chicago. Our modern indirect electric lights throw their beams in a highly satisfactory manner but some of the fixtures are eyesores—so to speak—of the first water.

Walter Kantack has designed a new school lighting fixture for Curtis that has trim flowing modern lines. It is made of aluminum that has been given a hard glassine coating, which makes it permanently efficient and lustrous. So we are told. We also note that this new indirect luminaire has no dust-catching pores, and that it will not break, mar or dull with time. That's a bit different from the fixture that heavy, heavy hangs over our head.

Baptism

In the turbid waters of a shallow pool, the white robed priest of the soda fountain immerses the water glasses. The theory is that by this sudden baptism the glasses are rid of all bacterial stain.

An entirely different system prevails at the school cafeteria in the next block. The manager told us just what she uses to keep the kitchen, dining room and dishes sweet-smelling and sanitary. Stainless steel steam tables and enamel sinks are kept in condition with Crystal White Scouring Cleanser. The cafeteria table tops, which are varnished, are washed with warm water and a neutral soap called Texolive. This keeps the surface clean and preserves the finish. Supersuds is used for dishwashing, and a careful rinsing follows.

The wholesome food at low prices, coupled with the high sanitary rating of the cafeteria, has gradually won pupil support away from the drug store soda fountain. The cleansing products that help to keep its sanitary standards high are purchased from the Colgate-Palmolive-Peet Company, 105 Hudson Street, Jersey City, N. J.

Den of the Ogre

There's an ogre by the name of Back Siphonage and his den is in the plumbing fixtures. Most folks did not know about him until 1933 although he had long been lurking around in dark corners and snatching off victim after victim without ever getting caught red-handed.

Now the P-men are after him, and sooner or later they get their man. The Crane Company, 836 South Michigan Avenue, Chicago, has put some of its sharpest P-men on the Back Siphonage trail. One of their best maneuvers to date is a raid on the drinking fountains, one of the chief hangouts of the ogre. They built up a sanitary drinking fountain that absolutely prevents contamination through Back Siphonage, simply by placing the bubbler jets above the rim of the fountain.

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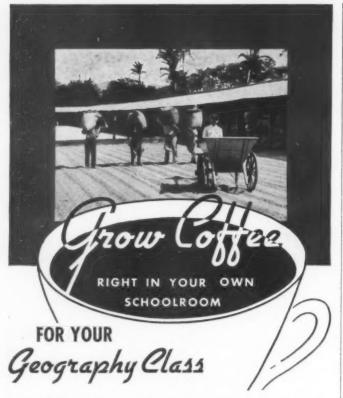
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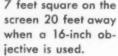
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YOUTH WELFARE IN GERMANY. By John W. Taylor, Nashville: The Baird-Ward Company, 1936. Pp. 259. \$3.75 plus postage.

Fairly detailed and technical study of the youth problem in Nazi Germany. Much detailed information that will be valuable to the students of this movement.

EDUCATIONAL PROGRESS AND SCHOOL ADMINISTRATION. A Symposium. Edited by Clyde Milton Hill. New Haven: Yale University Press, 1936. Pp. xv+400. \$3.

Twenty-three authors have contributed to this memorial symposium to Dr. Frank E. Spaulding covering various aspects of educational progress through school administration. The entire volume is of much higher calibre than the typical memorial treatment and should serve as a good general reference book in administration.

LAND PLANNING. By Lewis C. Gray. Public Policy Pamphlet No. 19. Chicago: The University of Chicago Press, 1936. Pp. 37. \$0.25. (Paper cover.)

Interesting monograph on land planning, with reference to federal policy.

MUSIC IN THE JUNIOR HIGH SCHOOL (Grades 7-9). By Karl Wilson Gehrkens. Boston: C. C. Birchard & Co., 1936. Pp. xvii+228. \$2.50.

Teachers in the junior high school will find this text of real value. Broadly conceived and written out of a life's experience, it presents a philosophy that alone is stimulating.

ELEMENTARY SCHOOL ORGANIZATION AND MANAGEMENT. By James Henry Dougherty, Frank Hermon Gorman and Claude Anderson Phillips. New York: The Macmillan Company, 1936. Pp xx+453. \$2.25.

Conservative treatment of the elementary school administratively, developed as a text in the training of elementary teachers.

Plain Talk. By John W. Studebaker. Washington, D. C.: National Home Library Foundation, 1936. Pp. ix+166.

In popular form John W. Studebaker, commissioner of education, presents to the adult public generally, through the medium of this small-priced book, the need for the rebuilding of the democratic processes locally. The instrument he advocates is the community forum. His experience in Des Moines is generalized for other areas and units. His underlying theme of the necessity for preserving free speech runs like a thread throughout the discussion. It is a book much worth reading by adults generally. It may be used as a basis for educating lay groups, closely affiliated with the schools, to forum possibilities. Its price brings it within the range of all.

Depressions and Their Solution. With a Chapter on Roosevelt and His Policies. By C. M. Garland. Chicago: The Guilford Press, 1935. Pp. 187. \$2.50.

An engineer analyzes our economic order with considerable spirit, points out its shortcomings in no uncertain terms and then proceeds to offer a solution. He suggests that continuous production be substituted for intermittent production to eliminate depressions. In substance, he offers as a solution not only a form of the corporative state but something that is closely akin to at least a highly socialized state. His promises are conservative in light of much of our Utopian literature on possible distribution of wealth and income. Whether one agrees with the author's philosophy in whole, in part or not at all, the book is still interesting reading. As a side issue he also offers a few comments on both the Republican and Democratic parties that indicate a thoroughly objective point of view respecting politics.





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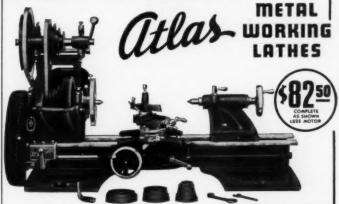
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THE ACTIVITY PROGRAM. By A. Gordon Melvin. New York: Reynal & Hitchcock, Inc., 1936. Pp. x+275. \$2.90.

Discussion of principles and practices in the activity school written simply enough for not only elementary teachers but also parent-discussion groups. The new school built around the already obsolete grade organization as a compromise to current practice probably. Interesting reading if not always as convincing and as valid as the author appears to believe. ALIEN AMERICANS. By B. Schrieke. New York: The Viking

Press, 1936. Pp. xi+208. \$2.50.

When race conflicts are considered in this country the inevitable first reaction is to the Negro. In this volume a well-known Dutch scholar attempts to present a much larger and wider picture of relations between natives and aliens. He considers the Chinese and Japanese conflicts in California; the Mexican and Indian difficulties; the Negro problem, and the general reaction of the United States to the alien. A significant sociologic study that should be read by every teacher and should find a place in every secondary library as a basis for study and consideration of problems that are so basic to all education.

Just Off the Press

THE GROCERY MAN. By Janet Wolf and Margaret Cook Holmes. Illustrations by Tyyne Hakola. New York: Noble and Noble, Publishers, Inc., 1936. Pp. 54. \$0.60.

Teachers' Guide to Child Development in the Intermediate Grades. Prepared under the direction of the California State Curriculum Commission. Sacramento: California State Department of Education, 1936. Pp. xxviii+631. Copies furnished free to superintendents of schools, directors and supervisors of instruction, and to elementary schools for use by principals and teachers of intermediate grade classes in California. To others, \$1.

Ten Little Songs for Children. By Jennie D. Hitchens. Illustrated by Gertrude Koch. Boston: Bruce Humphries, Inc., 1936. \$0.10 each.

UNEMPLOYMENT, RELIEF AND ECONOMIC SECURITY. A Survey of Michigan's Relief and Unemployment Problem. By William Haber and Paul L. Stanchfield. Second Report of the State Emergency Welfare Relief Commission. Lansing, Mich.: The Commission, 1936. Pp. xi+329.

Speech Construction. By Frederick W. Bond. Boston: The Christopher Publishing House, 1936. Pp. 146. \$2.

How to Study. By A. M. Jordan. Boston: The Christopher Publishing House, 1936. Pp. 97. \$1.25.

CREATIVE SCHOOL MUSIC. By Lillian Mohr Fox and L. Thomas Hopkins. New York: Silver Burdett Company, 1936. Pp. x+326. \$3.

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1936 CATALOG OF TEACHER HELPS. Historical Social Science Studies Prepared From Historical Motion Picture "Stills." Hollywood, Calif: Photographic History Service, 1936. Mounted Photographic Units, boxed, \$8.25 per unit of 15 photographs, or 15 lantern slides.

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More Than Lore. By Marion Talbot. Chicago: The University of Chicago Press, 1936. Pp. vii+223. \$2.50.

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For August, 1936

SECTION I-EDUCATIONAL ADMINISTRATION

THE EDITOR turns a telling pen toward six topics—religion in the	
schools, education in the cabinet, compulsory military training, school plant needs, teachers over forty, and the practice of hygiene preachments.	
Early American Rewards of Merit	1
Good conduct and diligence had their earthly and tangible rewards in the early 1900's, and from a study of the various collections of these items, HARRY B. WEISS, chief of the bureau of plant industry, New Jersey department of agriculture, weaves an interesting tale.	
Library Corners	1
California's well organized county library service to schools is briefly sketched by Helen Heffernan, chief of the division of elementary education and rural schools of the state education department.	
Farewell to Autocrats	1
Pages From an Old Report	1
Pick Your Plan for Social Studies	2
To fit local conditions, urges Virgil Stinebaugh, director of junior high schools and curriculum revision, Indianapolis.	
Making the Grade Principal W. B. Owen of Horse Cave, Ky., relates a modern parable of the squirrel and two knotholes to point up his discussion of subjective and objective estimates of pupil achievement. He leaves the reader, but not the squirrel, a possible remedy.	2
Eighteen Is Young Enough	2.
Self-Portrait	2
FREDERICK H. BAIR, new superintendent of schools, Bronxville, N. Y., has conjured up from his previous tabulations the typical American school superintendent. This fellow, whom he calls Carter Saunders, writes his autobiography. You may see signs of yourself in this composite portrait.	
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This is not a description of the disorder but a statement of preventive measures. Heber Hinds Ryan, principal of Wisconsin High School, University of Wisconsin, explains a system that discourages stardom by limiting the practice period in all activities.	

Side Glances-

MERICA has chosen the expensive way, Australia the economical. Yet it appears that the Australian system of teaching the isolated elementary school child is superior to our own in ways other than the financial.

"Lessons by Post" is the title of September's headliner, and the author is John Francis Cramer, superintendent of schools, The Dalles, Ore.

F AMERICAN society desires to make its schools agencies of propaganda, it can do so. It can enforce this aim by imposing loyalty oaths which must in the end bring in their train a system of coercion and espionage, narrowly prescribed courses of study and a censorship of textbooks.

Prof. I. L. Kandel of Columbia's Teachers College will tell in an article for September what he regards as the real issue in education today. Perhaps it won't be letting the cat out of the bag to say that Professor Kandel's "issue" is the race between propaganda and education.

HERE'S little fun in being stupid or slow, and therefore school is likely to be a dull or hateful place for a few pupils in every class. We know a classroom or two, praise God, where the stupider boys and girls get enjoyment out of their work along with the bright pupils.

We are thinking of one science classroom, in particular, where the children prowl about the room peering at snakes and cray-fish and dancing mice, even staying after school to help feed and care for them. When they come to class they don't sit down immediately to have questions fired at them. They make the

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rounds of the cages and exhibits, talking and laughing over what they observe. Finally they sit down for the formal class session. Even that isn't too formal, for there are experiments going on and films being shown, perhaps even a film of that very classroom.

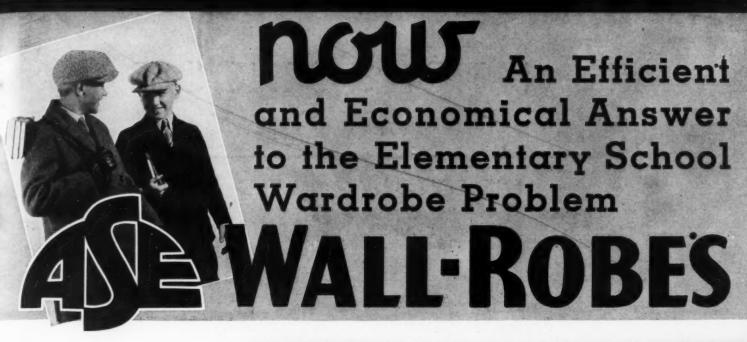
Dennis Glen Cooper of Sherrard Intermediate School, Detroit, will describe this classroom, his own, in the September number under the title "Life in the Science Room."

HE largest FERA school project in Minnesota is the Little Falls High School addition, a \$128,000 building to be described in this magazine. How relief labor, much of it unskilled, carried the burden of the construction—with evening classes in brick laying for those who wished to learn the trade—is as interesting reading to school folk as is the account of the plan and equipment of the building. Earl C. Van Dusen, superintendent of schools, tells the story, aided by photographs and floor plans.

ENERAL tax revision would lay a better foundation for the support of the public schools without decreasing the amount of tax revenue available for other governmental services, it is concluded by Leslie L. Chism, assistant professor of education, Washington State College, who will discuss in the September number the significance to education of a modern tax plan.

OW a boarding school classroom has been divided by a soundproof partition into a broadcasting studio where the pupils present over the air the programs they write in the other half of the room is to be told by Sherman P. Lawton on the teaching staff of Stephens College, Columbia, Mo., in an article scheduled for early use. From this studio emanate the only regular amateur all-woman broadcasts in the world, it is thought. Programs are written, enacted and partly produced by first and second-year students.

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The NATION'S SCHOOLS

LOOKING FORWARD

Religion in the Schools

ESPITE the constitutional guarantees providing for the complete separation of church and state, it is significant to note the progress made by certain pressure groups since the war in attempting to make the public schools dominantly Protestant, by the enforcement of Bible reading (St. James Version), according to a survey recently published by the National Committee on Academic Freedom. So far practice is evenly divided. Twelve states specifically require Bible reading, in six more it is permitted and in six states it is optional. A total of twenty-four states are thus ranged on the positive side. In twelve states the teaching of religion is distinctly prohibited, while in twelve others the statutes are silent, providing a total of twenty-four that maintain the traditional American attitude toward this delicate problem.

The most succinct and clarifying expression in this controversial area is an extract from a 1929 decision of the supreme court of South Dakota which declared such a statute void. The court said in part: "This country . . . was settled by men and women . . . with fervent religious convictions who were driven from their mother country by persecution because of these beliefs. They are responsible for the guarantees appearing in the constitutions of the United States and the several states of the Union. They knew by actual experience the evils of governmental control in matters of religion, and therefore sought to secure in this country a religious freedom never before enjoyed in any country."

Education in the Cabinet

Since the World War there has been fairly continuous propaganda for a much closer integration of local, state and federal agencies in the management and support of the educational function. One of the goals for increasing the material importance of education has been the creation of a new department of education in the federal government with a full-time secretary of education.

The minority demand for cabinet representation made

such headway for a period that during the Harding administration a compromise was suggested whereby a new department would be formed including and correlating three divisions — education, health and welfare — under one secretary. The Committee on Federal Relations to Education, during the Hoover administration, considered this question among others and finally presented both a majority and a minority report with respect to a department of education.

The lead in demanding a secretary of education was taken by the National Education Association, which has since the war made its achievement one of the planks in its permanent platform. While this platform theoretically represents the majority viewpoint of its membership, its objectives have never been democratically submitted to the entire membership for a referendum vote. Majority acceptance of the entire platform, including the plank on a federal department of education, may be considered open to considerable doubt.

Without realizing the totality of its implications, a large proportion of classroom teachers is undoubtedly in favor of such development. An emotion is easily developed among the teachers. On the other hand, it is more than probable that a majority of principals and superintendents are definitely opposed to the creation of a new department and are well satisfied to allow present federal provisions to continue. The independent or nonpublic schools are rather completely opposed to extension of federal control through enlargement of federal administrative function. Many who have been rational supporters of the idea have changed their opinion since viewing at close range the federal operation of emergency educational activities. A goodly share of the teaching profession has thoughtfully refused to be dazzled by the psychological bait of increasing the general importance of the educational activity by capping the pyramid with even so high a functionary as a political secretary in the President's cabinet.

The present federal administration in attempting to solve some of the pressing problems of administrative reorganization has on several occasions toyed with revival of the Harding compromise idea for a Department of Education and Health in which all welfare and social

service agencies would also be located. Apparently such consideration was no secret to the leaders of the Portland meeting of the National Education Association because a resolution included a neatly worded slap at the tentative administrative proposal. The Representative Assembly stated that ". . . It herewith registers its opposition to the administrative merging of education with functions generally classified as welfare services. The Association commends such services but believes that education and welfare are distinct functions and should be independently administered." Thus, apparently, the totality of membership of the National Education Association "views with alarm" a revival of the Harding compromise. It is also highly probable that if the flat demand of this group for an educational secretary had any possibility of becoming a reality an even greater and more effective opposition might quickly

Since as a matter of actual fact it is highly probable that neither the original demand nor the compromise alignment will become law in the immediate future, the Office of Education must continue to serve its normal function. General increases in financial support for this office are certainly essential if even such relatively minor things as statistics are to be gathered on time and published for the benefit of the profession before becoming obsolescent from old age. The office personnel is also in need of enlargement and definite improvement.

Compulsory Military Training

The question of compulsory military training (R.O.T.C.) in public secondary schools and colleges is still a vital issue to the teaching profession. The question of compulsory versus voluntary training received attention during the past year at certain state gatherings and was also considerably aired at the Portland meeting. A National Education Association resolution urged that the voluntary feature be substituted for the mandatory, permitting consistently democratic freedom of choice, and that this regular military training be made a definite part of the curriculum and placed under educational administrative control just as every other instructional activity must be.

The resolution is to be commended for its sanity and its judicial attitude toward this entire question. We have never held brief for the "boring-in" efforts of the war department not only to secure privileges which no other curricular area possesses but also to step beyond its routine function of technical military training and attempt the active indoctrination of the immature with selfish and narrowly conceived departmental propaganda. Rational opinion will tend to agree with a sane expression of military training on a competitive or voluntary basis in harmony with the theory of individual choice in the educational field. It will not sustain selfish attempts toward bureaucratic enhancement of its own

will to power and to dominate even under specious patriotic assumptions.

Over a long period of time well-informed public opinion will not support the selfish use of pressure-groups to intimidate educational agencies to accede to war department demands. A desirable solution would be the hope that the war department will itself realize the fundamentals of the democratic process and orient its preparedness activity to the civilian pattern.

School Plant Needs

ONSCIOUS of the need for basic information concerning social needs, one of the pertinent and distinctly worth while activities of the federal administrative authorities during the period of acute emergency has been the broad study of fundamental physical requirements and their crystallization in the form of building needs. Among the most important of these areas is the field of school plant development. Here the problem was studied not by an educationist, whose findings might naturally lean toward the activity in which he is most interested, but by one of the foremost of America's industrial engineers - Walter N. Polakov. His conclusions published in the July issue of The NATION'S Schools agree to a startling degree with our own estimates presented earlier. Catch-up needs are estimated at five billions of dollars and upkeep and improvement at \$330,000,000 annually.

The item of five billions represents school plant now urgently required to house properly children without school facilities; to relieve current crowding (large classes) and part-time programs in places where children are inadequately provided for. The matter of the total cost of reorganization of the administrative structure has not been rigidly computed since no one knows exactly what form this change will take.

Expressed in terms of needs of the schools and at the same time direct and continuous stimulus to the building industry, purveyors of equipment and producers of raw material, the catch-up program spread over a ten-year period would require an approximate total expenditure of six billion, or \$600,000,000 annually. Of this sum \$24,000,000 would be devoted to land; \$36,000,000 to educational equipment and furniture, and the balance of \$540,000,000 to actual materials and labor. Somewhat more than one-half of the annual total would actually be paid in wages. Paralleling catch-up and new construction work would be the maintenance and improvement of the current plant at \$330,000,000 annually, or a grand total of nearly one billion dollars a year for ten years! Spread as it would necessarily have to be, every state would find its economy definitely stimulated.

A natural question arising is the method of financing. The Polakov survey rightly mentioned no source of funds since it was definitely a study to determine needs. The federal government itself has formulated no com-

prehensive and long-range final policy with respect to commitments for meeting these needs. While the public works activity is as old as the government, yet the direction given it during the current administration is new. Looking at the facts objectively it seems more than reasonable that this new policy will be permanent especially if that phase of policy already developed with respect to roads is given due consideration. It is extremely doubtful whether the states can now finance this required building and maintenance program through taxation. It is just as certain that it should not be financed through borrowing. Intelligent planning indicates strongly that credit should be reserved as a cushion to stabilize current expense during future emergencies.

Current informal discussions of probable federal policy with respect to future PWA grants indicate two points of view: the first calls for matching locally or by states; a second possible policy is the consideration of full federal grants. If the latter policy prevails, the problem becomes relatively simple. If the existing policy is continued, then the problem of furnishing the balance of the funds is distinctly before the states as the legal educational agent. Next to the improvement of teaching personnel and enrichment of the educational program, school plant needs are most pressing.

Teachers Over Forty

s THE retirement movement to provide adequate terminal allowances for teachers who have become technically inefficient as a result of age spreads, it is of more than passing interest to note how quickly the larger urban school districts are following the industrial trend by establishing an age deadline for entering teachers. Institutions of higher learning for more than two decades have practiced a fairly general policy of not employing new personnel more than forty years of age. Transfers of personnel between institutions beyond this age-limit are possible and frequently made, but initial entrance into an academic career is definitely limited by an arbitrary age-policy. Large city school systems in increasing numbers are now following the same practice. In many it is specifically a part of the official personnel policy; in others it is actually practiced but officially denied. It is also increasingly obvious that the opportunities for transfers from one system to another within a state and between states is becoming difficult for teachers over forty.

The consensus of opinion among administrators appears to be that the reasons for this general restrictive tendency is due primarily to the implications of the retirement rules and the increasing risk in the higher age brackets under group health insurance. It is probably also significant that attempts by school districts to protect themselves from the pressure of teacher oversupply during the depression stimulated the tendency toward age restriction.

While it is true that the beginning teacher over forty is a greater actuarial risk than the younger individual, it is by no means certain that public education will not deprive itself of unusual services through the administration of an arbitrary rule of this character. The greatest menace, however, is administrative unwillingness to allow free interdistrict and interstate transfer of mature teachers who have passed the fatal forty line. It represents another tendency toward dangerous localism. This practice should be carefully reexamined.

Let Us Practice

THE proverbial man from Mars examining our public school preachments and practices would find much to feel sorrowful about in our unconscious inconsistencies. An increasing portion of our curriculum is being devoted to health and hygiene teachings and practices. Health habits and personal hygiene are stressed to a point where even the careless child begins to think about clean hands and ears. Constructive attitudes are being built up. Presumably the physical plant, representing the crystallization of curricular demands, should reflect these teachings and make provision for at least rudimentary sanitation. However, in this area for a multiplicity of reasons we find, instead, serious neglect and bland unconcern. Sanitary facilities in the toilets of at least half of our schools are very poor. In many instances lavatories are not even provided! When installed, they usually contain two faucets marked "hot" and "cold." Unlike the European faucets, both of which always furnish cold water, only one works in the schools and that's cold. The hot water faucet may not even be connected or, if connected, there seems to be no provision for fuel to heat the water. Towels are infrequent. While some lavatories are equipped with soap containers the majority of them are permanently empty.

Children return from toilet rooms without means of washing their hands. Contrary to all hygiene teaching even in our more progressive city school systems children are regimented from classroom and shop, without time to wash up, into the lunchroom for their noon meal. Casual inspection of hands at school cafeterias selected at random indicates a state of permanent mourning.

The need for adequate sanitary facilities in our schools, hot water, soap and towels, plus the opportunity to use them at least occasionally during the school day, is tremendously urgent. Unless these complementary facilities can be furnished, it seems to us a large waste of time to preach hygiene in the classroom and then insist that the child violate every precept in the practice of living in his school building. Complete sanitary facilities are essential to modern education and public health.

The Editor



Early American Rewards

By HARRY B. WEISS

EWARDS, and punishments, too, have always been associated with schools. To us now, the punishments inflicted by Colonial schoolmasters seem cruel and unwarranted. Whippings with birch rods, a cat-o'-nine-tails or a raccoon's tail, a wooden gag tied in the mouth with strings, the wearing of dunce caps, the labeling of children with large cards carrying degrading or ridiculous names, the use of pillories for the neck and hands, taps on the head with a heavy thimble, and all such barbarous treatments have long since passed into discard.

However, not all Colonial schoolmasters were cruel, and a few realized that children needed encouragement and rewards for lessons well done. Sometimes the prizes were little presents, special lessons in singing or pic-

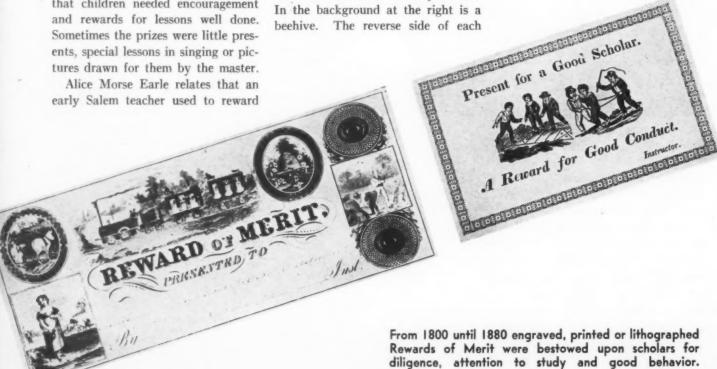
her good children with kisses, and also by dividing a single strawberry into minute portions among six or more scholars. In the dame schools, taught by women during Colonial times and attended by small boys and girls, gingerbread premiums were sometimes bestowed for good behavior. In addition, the exhibition of work well done may be considered as another type of reward for merit.

Metal Rewards of Merit, or tokens, were in use in some places. The New York Public Library has two such medals made of tin. One is labeled "The Good Boy," and the other, "The Good Girl." Each is 11/8 inch in diameter. Embossed figures show a boy walking along reading a book with a beehive at the left. The medal for girls exhibits a young lady knitting, while sitting alongside of a table on which there is an open book. In the background at the right is a beehive. The reverse side of each

carries the words, "A Reward For Good Conduct," surrounded by a wreath. The clothing on the figures is similar to that worn by boys and girls in the woodcuts of toy books published about 1830.

In this article, however, I am concerned with a different kind of Reward of Merit-something that was taken home and shown to mother and father and friends, and saved, although of the many that were given out, relatively few are now in existence. I am referring to the engraved, printed or lithographed Rewards of Merit, some in black and white, some in colors, some even embossed and decorated with gold, which were in use in this country from about 1800 to 1880 or a few years later.

Although I had the pleasure and



of Merit



privilege of examining the collections of the American Antiquarian Society, of Lillian Newton Stone and of Rutgers University library, totaling approximately 1,400 pieces, and upon which this article is based, I was unable definitely to date any of them before 1800. Alice Morse Earle, in her book on "Child Life in Colonial Days," makes no mention of engraved or printed Rewards of Merit, and although Clifton Johnson in his "Old Time Schools and School Books" fails to mention them in the text, he does illustrate several, only one of which is dated 1798, and this is a manuscript Reward of Merit.

used before about 1800 and that the engraved or printed ones came into use about that time or shortly afterward.

The rewards of merit varied in size from about 1 by 2 inches to 4 by 6 inches, some being even larger, and while many were of bank note size, others were shaped like playing cards. They were used principally in the primary grades of public and private schools and in Sunday schools, being distributed daily, weekly or monthly as the



Hattie Elliot Johnson in her article, "Old Time 'Rewards of Merit'," * believed that the system of bestowing Rewards of Merit in New England originated in the dame schools, which is probably true, but from an examination of the material at my disposal I am of the opinion that mainly manuscript Rewards of Merit were

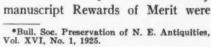
given for diligence, attention to

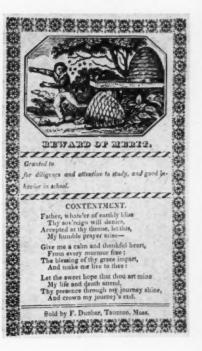
written on it, but more often it was

Occasionally the "reward" was labeled "Certificate of Honor," "Testimony of Approbation," "Premium," "Present for a Good Scholar," "Praemium Laudis," "Application," "Certificate of Merit," "Merit," "Teacher's Gift," or "A Token of Esteem," but "Reward of Merit" was the standard title.

At times the "Reward of Merit" was given specifically for good behavior, punctual attendance or correct deportment, and sometimes "geography" or "spelling" was written along one edge. On most of them it was made plain that the recipient merited the approbation and esteem of the instructor, and frequently the recipient was "recommended to the favorable notice of his friends."

Some Rewards of Merit were num-







Instructor or instructress signed the "reward." Publisher, printer or seller was likely to place his name conspicuously on the certificate. Massachusetts was the state from which many of them came. Occasionally the illustrations were hand colored. Some bore wood cut drawings; others were highly colored lithographs.

bered with large figures indicating that some pupils were given more "merits" than others, and in some schools a certain number of merits was necessary for a "Certificate of Honor." The English Classical School of 459 Broadway, New York City, issued a Reward of Merit that resembled a bank note with illustrations of an eagle flanked by portaits of statesmen and whorls of lines at each end. This, it was stated on the face, would be redeemed by premiums on the first of January.

In addition to the actual wording of the "reward" itself, little verses frequently appeared, setting forth the advantages of early rising, attention to studies, the benefits of knowledge and the reward of folly.

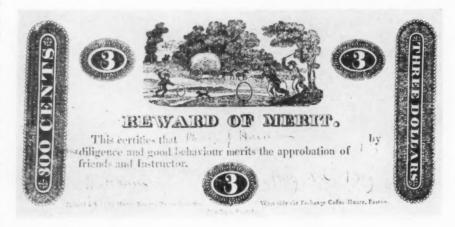
In addition to such verses on the face of the "reward," the back, particularly of the Sunday school "reward," frequently carried a hymn, religious verse or verses admonishing children to be good and not to lie, cheat or steal. In rare instances the publisher or seller of the "reward" advertised a school book.

But the crowning joy of the Reward of Merit was its illustration, and I am sure that the children were pleased as much by it, as by the "approbation and esteem" of the teacher. Some "rewards" were printed entirely from engraved copper plates, others carried woodcut illustrations, some

REWARD

This is to Certify that Landance and Good Conduct merits the approbation of For Punctual Attendance and Good Conduct merits the approbation of Landance and Good Conduct merits the Approbatic Merits and Conduct merits the Approbation of Landance and Good Conduct merits the Approbatic Merits and Conduct merits the Approbatic Merits and Conduct merits the Approbatic Merits and Conduct merits and

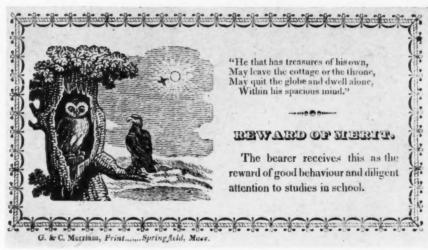
Most of the illustrations were in a pleasanter vein than this churchyard scene. Outdoor games, farm life and newer modes of transportation were often featured. Frequently verse and symbols extolled the virtues of early rising and attention to studies.



were lithographed, and many were printed from type. Occasionally the illustrations were hand colored. As they became more popular and more standardized, they became less interesting, particularly the Sunday School "rewards" prevalent in the 60's and later, which were lithographed cards, highly colored, devoid of either the names of the pupils or teachers and which were distributed in large numbers. Sometimes the







"rewards" were printed on colored paper.

Rewards of Merit may be classified most easily by the types of their illustrations, such as historical scenes and portraits, indoor scenes, outdoor scenes, religious scenes, rural scenes, transportation scenes and symbolical characters.

Many "rewards," even the early ones, were sold in sheets, to be cut apart by the teacher. Little is available about the engravers and il'ustrators as few were signed. More information is available about the publishers, printers and sellers as their names frequently appeared upon them. The New England states particularly Massachusetts, contained numerous publishers of "rewards."

Many of these printers, publishers and booksellers who supplied Re-

wards of Merit were the principal publishers of children's books during the early part of the nineteenth century and it was not unusual to find them printing and selling "rewards" along with their primers and other types of children's reading matter.

Characteristics of Various Periods

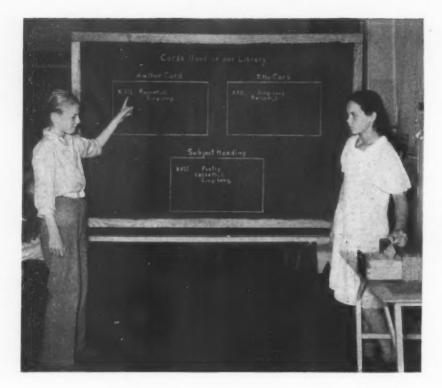
Generally speaking, from about 1800 to 1835, Rewards of Merit flourished in manuscript, copper engraving, woodcut and printed styles, many somewhat resembling the bank notes of the period, and a few appearing in colors.

After about the year 1835, the black and white and the pale colored lithographic "rewards" began to appear along with others and later the colors became brighter and woodcut illustrations gradually disappeared. In the 50's and 60's and later there

were many gaudy Sunday school "rewards" decorated with flowers, wreaths and other ornamentation of a rococo style, and many public school "rewards" became mere cold, printed cards with no attempt to find childish favor by means of decoration or illustration.

Sometime after 1880 Rewards of Merit disappeared entirely from the public schools, except in a few places, as more modern systems of grading were instituted and now they are objects of interest only to antiquarians. However, although absent materially, their idea continues to exist in some shape or another and merit is still being rewarded in the schools.

All of the illustrations which accompany this article are from "rewards" in the collections of the American Antiquarian Society and of Lillian Newton Stone.



Library Corners

By HELEN HEFFERNAN

Children are learning to use the card catalogue at the Colusa Elementary School. Below is the library corner in the sixth grade room; it serves several grades.

stantly striving to assist the schools to develop methods of making more effective use of the library service. Two major emphases have characterized these efforts. The rural schools are encouraged to organize attractive library corners, or when an extra room is available, to set up a separate library. They are encouraged, also, to organize their miniature libraries in accordance with correct library procedure in order to provide an opportunity to give the children definite instruction in the use of books and libraries.

Colusa County has been particularly successful in achieving these purposes. In the rural schools the children have a large share in the management of the library and have an opportunity to develop qualities of good citizenship by participating cooperatively in an activity of value to the welfare of the entire group.

School libraries are becoming more and more essential to effective instruction. An enriched curriculum and instruction centering around large integrated units of work require a greater use of books and instructional material than ever before. The single textbook is no longer adequate to a satisfactory educational program, but must be complemented by reference books, supplementary texts and general library reading.

Since 1911, California has enjoyed the benefits of a well organized county library service to rural schools. Through utilizing the advantages of book circulation, rural schools have access to a wide variety of material not ordinarily accessible in the small school district book collection.

The county librarians are con-



Farewell to Autocrats

By LEONARD L. BOWMAN

TRANGELY enough the phrase, democratic educational administration, does not seem to be a familiar one among workers in educational administration. Judging from the lack of attention given to it and the dearth of literature that gives any consideration to the subject, democracy in educational administration seems to be a highly unpopular subject.

We have talked long and hard about the necessity of a widespread educational program for a democracy, but little emphasis has been placed upon the importance of administering such a program according to democratic principles. We are reading much these days about the implications of the democratic concept in society and how these implications should carry over into education in a democracy and should be the guiding considerations in building the modern curriculum.

We have come to accept the theory that the chief function of the American public schools is to provide training for living effectively in a democratic, representative plan of government. But the implications of these objectives and ideals do not seem to have carried over into the field of educational administration to any appreciable degree.

A prominent school superintendent in California said recently, "I am absolutely astounded at the amount of autocratic power that can, and in a great many cases is, being wielded by superintendents of schools." Moreover, there is not a sufficient awareness on the part of boards of education, the teachers or the public readily to detect autocratic attitudes and methods, and upon detection there is oftentimes not sufficient re-

sentment to cause the elimination of such methods. Thus, the autocratic administrator can often maintain himself in his position almost indefinitely.

Autocratic methods of the rankest sort are being practiced by school superintendents pretty generally throughout the country. If a school board member has a tendency to disagree with some of the superintendent's policies or shows a disposition to want to know too much about the schools, it is not altogether unheard of for the superintendent to get busy "on the side" to have such a member eliminated at the next election.

Under the autocratic superintendent, an unseasoned principal who has the audacity to raise his head in protest against any policy emanating from the central office is sure to come to some bad end, and the autocrat has a thousand means of seeing that such an event comes to pass.

A part of the administrative policy of the autocratic administration is for the superintendent and his inner council of trusted subordinates to keep the teaching personnel combed for potential trouble makers. It is not

To implant in the pupil's mind a deep resentment for and a resistance to autocracy wherever encountered is the school's job. The trouble is that the schools that preach democracy are often dominated by autocrats of the front office or the classroom. uncommon to find whole systems shot through with fear and suspicion. The autocrat is always on his guard against teacher organizations and is successful by means of his autocratic methods in preventing their existence in many cities. Especially in smaller systems he looks with suspicion on any grouping of his subordinates, even for social purposes.

Perhaps an extreme case is that of a principal of a rural high school who seems to have as one of his definite policies the spreading of gossip and rumors among his faculty members to the end that they will not associate with one another. The autocrat in the superintendent's office as elsewhere demands submission and obedience accompanied always with a discreet tongue, and a teacher's initiative and aggressiveness prove to be her worst enemies and cause for dismissal, under some guise or other.

Autocracy in school administration is not confined to the superintendent's office. Many principals rule their schools with a strong dictatorial hand. In such a school the teachers and pupils breathe and move and have their being according to edicts from the principal's office.

More regretable still is the fact that we find little autocracies set up in many classrooms. We still have with us in great numbers the type of teacher who has a real sense of possession in regard to her classroom and considers it her little kingdom over which her word is the highest law. A pupil entering her kingdom is to become a submissive and obedient subject at once and is required to conduct himself according to the standards insisted upon by the teacher. Of course, these standards differ from room to room and the wise pupil is quick to note these differences and regulate his conduct accordingly.

If we accept as the chief function of public education training that makes possible effective living in a representative democracy, and if we believe that we learn to live by living, then the inconsistency of our present situation must be apparent. It would seem that we are trying to produce a democratic product by means of an autocratic process. We are apparently trying to turn out citizens for a democracy by schooling them in an autocracy. We somehow cherish the fond hope that the good pupil who is submissive to the dictates of his teachers and conducts himself according to the decrees from the principal's office will, upon graduation, blossom forth as an effective citizen in a democracy.

Democracy has been given lip service only in the schools of the nation. We preach democracy in the classrooms but our preaching is oftentimes decidedly counteracted in the pupil's mind by the organization of the school itself, and what we do speaks louder than what we preach.

Pretenses at Democracy

Autocratic attitudes and methods should not be tolerated in educational administration in this country, whether such methods are exercised by a domineering school board member, a dictatorial superintendent, an autocratic principal or teacher or by any other worker in education. As a definite objective of education we should strive to implant in the pupil's mind a deep resentment for and a resistance to autocracy whenever it is encountered.

Being democratic is more than acting democratic. A superintendent who allows himself to be seen occasionally chatting with a janitor may or may not be democratic. A study of his methods of administration will more nearly reveal the extent of his democratic leanings. A principal may permit a student organization in his school, but if he hedges it about with restrictions and limitations, by one means or another dominates its elections, and controls its discussions and policies he can hardly be said to be

exhibiting democratic leadership. A teacher may attend all the games, sit on the bench, and be just "one of the boys," and yet his democratic tendencies have little carry over to his methods of securing desirable conduct in his classes.

Democracy Is Reasonable

Such pretenses at democracy not only in education but also in our social and political relations have done much to bring about a much too general criticism to the effect that democracy has failed because it is impractical and idealistic. It would seem reasonable to try democracy more extensively before applying such a criticism to educational administration.

Democracy is more than a plan of action, a method of procedure, a type of conduct. Democracy is a fundamental attitude of mind. This attitude of mind has its own approach to every problem. It colors every relationship of life. Democracy is reasonable. It does not rule out the guiding hand of the parent and the teacher. It does not exalt the immaturity of youth above adult judgment and experience. It does not excuse adult society from its responsibilities to the oncoming generation. In fact these responsibilities are accentuated in that a democratic society depends upon general widespread education. Democracy controls conduct according to generally accepted principles and does not resort to expedi-

What then are the characteristics of a democratic organization?

- Such an organization must be based upon the spirit of mutual understanding and cooperation.
- The procedure of the organization must be according to plans that have been worked out and decided upon ahead of time. An organization without plans must often resort to expediency as determined by its leaders.
- 3. The making of these plans must be shared in by all the members of the organization. Furthermore, these means of sharing are kept open and active all the time.

- 4. A democratic organization must have a thoroughly informed personnel not only concerning the plans and objectives of the organization, but also concerning the organization itself with its lines of authority, the placing of responsibilities and the assignment of duties.
- 5. A democratic organization must have responsive and responsible line officers; otherwise the organization soon ceases to be democratic.
- 6. There must be a common interest in the results to be obtained.

It is not at all improbable that educational administration in the United States has made a decided contribution to whatever unpopularity the democratic concept may be suffering in this country. The program of public education should be planned and administered in a cooperative and democratic manner. There should be no place in public school administration in a democracy for the autocrat or the demagogue.

High Rate of Sickness Among Pupils in Japan

Following an investigation over a period of one year, the sanitary section of the educational department of Japan issued a report on the health of the pupils of the middle grade schools, whose ages are from fourteen to eighteen years. In 1934, of a total of 736,500 pupils, 2,092 died, 3,766 left school because of illness, 9,734 stayed away from school for long periods because of sickness and 47,884 were absent for more than a week for the same reason.

The sickness for the most part was tuberculosis, and it is felt that one of the main causes of the prevalence of the disease is competitive examinations, for even the children in primary grades must prepare themselves in order to enter any good school.

The lack of proper sanitation in the schools is also believed to be a cause. This is due to the poverty of the local governments, and private bodies of various kinds are organizing to provide needed equipment.

Pages From an Old Report

By JAMES E. GLAVIN

S PROGRESSIVE EDUCATION, as now promulgated and popularized in upper case type, new or old? If we hold with Aristotle that "every art and every kind of philosophy have probably been found out many times up to the limit of what is possible and been again destroyed" or incline to other assumptions, it is interesting to trace the origin of certain ideas that are generally credited with "newness." Let's look over the pages of some old reports.

Recent researches in the history of the Albany High School led to study of the apparently little known contributions of its first principal, Dr. John Edwin Bradley. He organized the school and was its head for eighteen years, resigning to become superintendent of schools in Minneapolis. Some of his philosophy and practices sound suspiciously like the current "learning through interest," "discipline as an intrinsic factor," "flexibility in grading" and "performance concepts."

At the close of the first year (1869) of school he wrote:

"Standing both legally and morally in loco parentis, it is the aim of the Principal to develop character and teach self-control rather than to repress the legitimate buoyancy of youth. There are those whose principal pleasure in visiting schools is in witnessing a parade of order for the sake of parade, such as scholars getting their books, pens, etc., by a series of motions mechanically counted by the teacher, or long files of scholars marching with folded arms and tread-mill step.

"Such exhibitions are not given in the Free Academy. We believe that they are, to say the least, behind the times; that they belong to the same Forgotten and buried, the old becomes new. Progressivism in education was, in name only, unfamiliar to Dr. John Edwin Bradley, first principal of the high school at Albany, N. Y. Aibility grouping was his pet theory and he inaugurated it in the Free Academy in 1869.



age as the rawhide, the thumb-screw and the dark closet with its goblin terrors. They can be seen in any of our reformatory institutions in a perfection that no educational establishment can hope to rival. Of course, in the management of a school, system and order are requisite, but it should never be forgotten that the order is for the sake of the school, and not the school for the sake of the order. The greatest personal liberty compatible with the decorum of the school, and the harmonious working of its system, is constantly allowed. . . .

"Although all who entered the Academy were required to pass the same examination, considerable diversity was found in their actual attainments, and some thirty-four were thought to be so much further advanced than the rest as to justify their promotion to studies of the second year. Of the remainder three distinct grades have been formed, though all remain in the same academic class and pursue the studies of the first year. We have thus been

able to assign to each student such an amount of labor as his proficiency would justify.

"In this connection your attention is requested to the great varieties of tastes, capacities and aims of the students with a view to a more adequate provision for them. In attempting the classification above mentioned, it was frequently found that those who exhibited a proficiency in one study showed a corresponding deficiency in some others. Now, while we cannot, and ought not to, consult every caprice and prejudice of the scholar, we ought not, on the other hand, to ignore his natural aptitude nor his future occupation. Such a modification or extension of the present course of study as shall give more option to the student is recommended."

The 1870 report considers the success of ability grouping. In part Doctor Bradley says:

"The second class is divided into three sections; the first and second divisions taking the English course of study, the third the classical. It is proper here to remark that the great diversity in the tastes, capacities and previous attainments of the members of the same academic class is a source of constant embarrassment.

"From the nature of the case the difficulty is one which can never be remedied; but we meet it in a measure by grading each class. While, therefore, the institution will nominally have but four classes, it will really have from eight to twelve distinct grades of scholarship; and so considerable is the difference in the grade of these separate divisions, that the students esteem it scarcely less creditable to be promoted from a lower to a higher division than from one class to another. By this arrangement we are able to adapt the instruction much more fully to the wants of the individual students than can possibly be done in those institutions whose sections are made alphabetically and all required to do the same amount of work. . . .

"The third class, like the second, is graded into three divisions. This class was admitted to the Academy in September, 1869."

In 1874 he speaks of what reads much like "ability grouping" in terms of intelligence and performance. Of the freshman class of 149 entering in September, 1873, he says:

"It was divided on entering into six 'divisions' or grades, according to the proficiency and intelligence of the pupils. Although they had all passed the same examination for admission. considerable diversity was as usual found in their ability and actual attainments. By this plan of grading the sections of a class which is adopted throughout the school, we are able to adapt the length of the lessons assigned and our methods of instruction to a student's ability in a manner which cannot be done in schools where classes are not large enough to require division. While all these divisions are united in one academic class, practically each forms a class by itself and the higher divisions can accomplish a larger amount of work than the lower divisions."

When in his report of June 3, 1873, Doctor Bradley wrote: "Methods of instruction and results of instruction that passed unchallenged twenty years ago, are rejected and derided now," he did not know he was mak-

ing a prophecy but so it was because about twenty years later his ability grouping in the Albany High School was abandoned. And now it has been resurrected to be represented as the great panacea.

Pick Your Plan for Social Studies

By VIRGIL STINEBAUGH

Since human relationships are so varied and complex they cannot be perceived in toto. Therefore, certain phases must be selected for study and analysis at any particular time. Selecting the plan of organizing materials is an inescapable and baffling problem for those who are constructing the social studies curriculum.

Various alternatives are possible. At least three may be readily distinguished: (1) using the traditional subject classification and organizing separate courses of study in history, geography, civics and the like; (2) ignoring subject classifications within this field and planning a general social studies course, and (3) eliminating all subject classifications and planning an integrated curriculum.

It is recognized that many different factors may affect the success or failure of the plan that is adopted. Such matters as the general plan of school administration, building facilities, textbooks, training of teachers, and the general attitude of the community are all important considerations. The primary criterion is which plan will best facilitate the formation of meaningful social concepts.

No one can claim that any one of these plans is the sole means of arriving at the desired objective. There is a great range of possibilities within each of these major choices. For example, if the plan of organizing separate subject courses is adopted the course of study in history may be organized as a chronicle of events encyclopedic in character, a series of isolated facts with no meaningful relationship apparent. On the other hand, the course of study in history can be organized about vital topics of problems in such a manner as to reflect clearly certain significant relationships.

Equally extreme positions could be pointed out in each of the other plans of organization. Insofar as subject lines become a barrier to the establishment of meaningful relationship, to that extent it is desirable to eliminate them. For this reason the general social studies course of study or the integrated curriculum may afford greater opportunities for reflecting desirable relationships. The administrator must first decide which plan is the most practical and feasible in the local school system. The next consideration is how to make the adopted plan facilitate the formation of meaningful social concepts as far as possible.

Obviously the most effective integration of experience is effected in the classroom under the direction of an able cultured teacher with broad experience. Such teachers are always alert to utilize every opportunity to build up meaningful concepts by relating new ideas to the previous experience of the learner and by collecting pertinent data from every available source. In planning the made-in-advance curriculum there are certain definite limitations to one's ability to reflect these relationships in the course of study. The primary responsibility of the curriculum maker is to adopt a plan of organization that will facilitate rather than hinder the efforts of the classroom teacher in achieving this objective.

Making the Grade

How Shall We Assign Pupils' Marks?

By W. B. OWEN

SEVERAL years ago I was confronted with this intriguing but somewhat anomalous proposition. A squirrel was seen at a given time in a knothole of an oak tree; ten seconds later he appeared in a second hole far above the first. Nine seconds later he was back in the lower hole, eight seconds later in the top hole. If he had continued this performance with uniform acceleration, how long would it have taken before he appeared in both holes at precisely the same time?

The conclusion is obviously absurd, but it is seemingly logical if we accept the original premise, that he could have maintained a constant increase of speed for ten seconds. Likely the little fellow realized that he could never eat acorns in both caches at the same time, yet educators have been wrestling with a similar problem throughout the existence of our modern school system.

To this day some distinguished schoolmen and a host of ambitious novices continue seeking a device, a mark or a grade wherewith to indicate pupil achievement in both subjective and objective matter with which the curriculums are concerned. They attempt to produce a hypothetical squirrel with sufficient agility to make simultaneous appearances in two knotholes, while the rest of us have neither the temerity to shoot the squirrel nor the courage to make more holes.

There are those who contend that the subjective elements, so long a part of the fabric from which grades are made, should be summarily and permanently disregarded. They insist that the so-called subjective estimates of teachers are, in reality, made up from the observation of pupil reactions in a number of cases wherein the conditions afford excellent objective data. On the other hand, there are still great numbers who contend that many phases of the educational process are altogether beyond the scope of objective measurement. Until such arguments are conclusively settled, if ever, it is well that we attempt to improve on current practices in the matter of assigning grades to pupils.

The following list of objective and subjective factors which might influence the make-up of grades was given to a group of forty-seven college graduates, all of whom were teachers or were preparing to teach. They were instructed to rank the factors, 1, 2, 3, 4, according to the importance they considered each in determining grades for school pupils.

1. Personal impression made on instructor(2. Self-reliance of pupil....(3. Successful performance in examinations(4. Instructor's estimates of oral recitations(5. Preconceived idea of instructor regarding pupil's ability(6. Excellence of written work(7. Effort made by pupil....(8. Attention and interest shown in work during class recitations (9. Punctuality of pupil in completing assignments..(10. Consideration for handicaps: physical, mental,

The following table includes a composite ranking and the rankings made

environmental(

by groups determined by their teaching experience.

According to the views of this comparatively small group, we should consider the factors in the following order:

- 1. Effort made by pupil.
- 2. Successful performance in examinations.
- 3. Attention and interest in class work.
- 4. Instructor's estimate of oral recitations.
 - 5. Self-reliance of pupil.

The other five are not included owing to their low ranking. It will be noticed that "excellence of written work" was placed seventh by every group.

Inspection of the various factors discloses that only the second, "performance in examinations," and the fourth, "estimate of oral recitations," may be purely objective and the fourth is likely to be partly subjective. The others, "effort made by pupil," "attention and interest in work during class recitations," and "self-reliance" fall under the subjective classification.

The following data concerning two pupils, A and B, were given to the same group of teachers with instructions to assign a grade for the semester's work to both A and B. The percentage scale was: A, 95 to 100; B, 85 to 94; C, 70 to 84; D, 60 to 69; F, 0 to 59.

Very likely some of the scores assigned A and B by their instructors were derived from subjective sources, but to the forty-seven teachers, who made the grades here, the scores became purely objective because they

TABLE I—COM	POSITE		KING THEI							GR	OUPS	DETERMINED
Composite	No. Rank	7	3 2	8	4 4	2 5	9	6	10	1 9	5 10	(47 teachers)
0-4 Years' Exp.	No. Rank	3	7 2	2 3	8	9 5	4 6	6	10 8	1 9	5 10	(17 teachers)
5-9 Years' Exp.	No. Rank	8	7 2	3	4	9 5	2 6	6	10 8	1 9	5 10	(14 teachers)
10 Yrs. or More	No. Rank	7	8 2	3	4 4	2 5	9	6	1 8	10 9	5 10	(16 teachers)

Forty-seven teachers rated factors they considered important in determining grades. Then they were asked to assign a grade for the semester to two pupils. The results do not tally.

had been quite definitely evaluated.

A careful analysis of the data discloses that on a comparative basis B is decidedly superior to A in both oral recitations and objective examinations, while his average score in subjective examinations is 85 as compared to 83 for A. In the composite ranking "oral recitations" and "performance in examinations" are listed fourth and second, respectively. A's average score in "written recitations" is 13.8 points higher than B's, but "written recitations" ranked seventh in every group. A's scholarship record is clearly superior to B's, which condition should not have affected the grades materially, because "preconceived idea of the instructor concerning pupil's ability" was ranked last in every case.

The question then becomes: Why did A receive higher grades than B? Seemingly there are two answers: (1) superficial analysis of the data given, and (2) influence of factors ranked low in the actual make-up of the grades assigned.

Certainly there may have been other reasons. If there were, that is all the more reason to believe that grades become a composite of a number of factors despite contentions that they should not.

The system of assigning grades that follows contains features that have been alternately defended and condemned. It embodies both objective and subjective estimates and the application of a calibrated scale to produce a composite grade that gives some semblance of uniformity in its results. It is predicated on the following:

1. Scores and marks on a given

	A AND B AND GRADES ASSIGNED THEM 47 TEACHERS
Lis	st of Factors
Pupil A (History)	Pupil B (Geometry)
Age 17, average industry, talkative, e cellent conduct, member of deba team	reticent, inclined to be tardy, hard worker at times, member of footbal team
Attended 82 days, tardy 9 times	Attended 86 days, tardy 19 times
Oral recitations 17 satisfactory 6 incomplete 7 unsatisfactory	Oral recitations 13 satisfactory 4 incomplete 3 unsatisfactory
Written recitations 88, 82, 73, 92, 100, 84, 91, 87, 73, 7	Written recitations 61, 83, 80, 58, 76, 64, 77, 82, 78, 74 52, 68
Objective examinations 100 100 100 difficult medium easy Right 72 84 90 Class mean 70 80 84	Objective examinations 40 100 100 difficult medium easy Right 34 34 36 Class mean 26 31 35
Subjective examinations (teacher's scores) 88, 84, 79, 81	Subjective examinations (teacher's scores) 92, 85, 77, 86
Scholastic record 13 A's, 10 B's, 1 C	Scholastic record 4 A's, 11 B's, 9 C's
Grad	les Assigned
Pupil A 1 A 32 B 14 C	Pupil B 0 A 15 B 32 C

test or exercise should indicate achievement only.

2. Term or semester grades should be a composite of estimates of daily work, examinations and of the purely subjective factors, such as initiative, interest, industry, appreciation; the composite of these items being made up in the proportion of 2:2:1.

3. Scores and marks should be distributed so that they conform fairly closely to the normal curve, 10 per cent, A's; 20 per cent, B's; 40 per cent, C's; 20 per cent, D's, and 10 per cent, Failures.

4. Grades should be uniform throughout a period of years.

5. An arbitrary index should be

assigned each grade at the midpoint of the range for that grade. Range: D, 3 to 4; C, 4 to 6; B, 6 to 7; A, 7 to 8. Indices: A, 7.5; B, 6.5; C, 5; D, 3.5, no credit being allowed for mark lower than D.

6. C grades should represent average work of pupil in practice as well as in theory.

Referring to daily work as x, examinations as y, and the subjective factors as z, the formula becomes:

$$Grade = \frac{2x + 2y + z}{5}.$$

If a pupil's marks are recorded: x=A, y=C, z=C, then his formula is: $Grade = \frac{15+10+5}{5} = 6$, or B.

Eighteen Is Young Enough

By ROBERT J. PARKER

OW large a proportion of human life can and should be devoted to preparation for living — for productive participation in our everyday life? There is no doubt that a larger proportion of life must and should be devoted to the preparation for living if our present system is to survive.

A few years ago it was impossible to get an amendment to the Constitution of the United States doing away with child labor. But the forces in favor of such a measure have grown in strength until now child labor has been virtually done away with for a time at least. There is a growing tendency in the United States to keep children out of gainful occupation for a longer period of time, the age in California being eighteen. Compulsory school attendance laws differ widely from state to state, some states requiring such attendance only to the age of twelve. But a survey of the educational tendencies in the various states of the Union leads to the deduction that slowly this age limit is being pushed forward.

Those Who Oppose Trend

Many criticisms have been directed against this tendency. Some of them have come from families who would like to have their children adding to the income of the family as a whole; some have come from taxpayers who feel that the money directed to the support of schools is far in excess of the necessity of them and the advantages secured by them; some have come from employers who are anxious for the cheap help child labor provides them. But regardless of these criticisms the movement for increasing the years when a child is socially dependent has gone on.

There is at present a large body of unemployed. Many of these people are men who should be the supporters of their families. It is useless to say that once the depression has run its course there will be plenty of openings for people who want to work. The increasing intensity of the machine age and the censtant invention of machines that do the work of many men are silent proof of the fact that such an optimistic statement cannot be true.

Some solutions have already been offered: the decreasing of the hours of the working week; the attempt to curtail the employment of women, especially the married ones, and the plan for pensioning people at a certain age in order to remove them from competitive employment. All of these are workable but they are not enough. To them should be added the raising of the age of compulsory school attendance in many states so that young men and women do not enter the field as competitors for positions that should and must belong to men who are not old enough to be retired and who are the sole supporters of their families.

How much does a pupil who has had only a grammar school education know about the art of living and being a good citizen? Very little. He doesn't know a great deal more when he has finished the training that four years of high school represent. He has learned a few facts here and there, he has had excellent physical training which has helped his physical being, he knows something of the process of living with his fellow-beings. For the most part he has had but a small amount of training in any vocational line and his instruction in citizenship has been limited

From six to eighteen is not too large a proportion of human life to be spent in preparation for living, this author thinks. He recommends the age of eighteen as the minimum for school attendance in all states.

largely to a semester or perhaps a year in United States government and social problems.

If the level of our living is to be maintained and even raised, children must be taught more than this. They must have more experience so that they will know how to adjust themselves in a world in which time for leisure is increasing and the business of earning a decent living is becoming more difficult.

Junior College for the Masses

More time should be devoted to teaching pupils the art of living as well as the business of earning a living. High school training at least is essential. Courses of study which will help discover the talents and vocational tendencies as well as those which will teach pupils to discover their proficiencies in certain avocations need to be more seriously considered. This is already being done in some of the more progressive states, but this education with its varied implications should be more widely extended.

California has felt that even high school training is not sufficient for the masses of young people. The result of this belief has been the establishment of two-year institutions of higher learning, junior colleges so called. For the most part these institutions are centers of free education as are the high schools. If it is essential that the majority of pupils be allowed and perhaps eventually compelled to attend these institutions to develop within themselves a greater capacity for living, it is unfair to deprive certain pupils of this opportunity because they are lacking in finances.

More Intelligent Workers

The junior college can be the center of development of social intelligence and at least limited vocational training. In this world today it is difficult for a pupil who graduates from high school with perhaps a year or two of vocational training to obtain a position. Competition is too severe. The time when a young man or woman could go into a certain profession or business as an apprentice is rapidly vanishing. Today there are too many experienced people out of work. The employer does not find it necessary to take young people in and train them.

If the junior college and the high school direct their energies toward the training of students for intelligent citizenship and adjustment in the working world as well as for some specific vocation, students whose social dependence continues to eighteen or perhaps twenty will be better fitted for a place in the world's activity. They will be better fellowmen and more intelligent workers. When they have finished this period of training, if they are of average intelligence, they will be aware of the problems in the everyday world. They will have become aware of these problems through well-directed courses in social problems and orientation. They will know, at least approximately, what line of endeavor they wish to pursue. They will be more likely to obtain employment because of their training and the markets will not be overcrowded with a great number of young people who have never extended their education beyond the grammar school. More

important they will not be faced with a long period of discouragement during which they are seeking some vocation into which they will fit.

Utopian? Perhaps. But eventual I believe. Not many years ago no one would have believed that high school education would have extended its sway over as many pupils as it does today. These changes must, of course, be gradual, but they should come if the administration is awake to the problems that our youth are facing. These conclusions do not for the most part include the upper 5 per cent or the lower 10 per cent of pupils; they concern the masses, the average middle-class children with average intelligence. There must always be universities to train those people who are capable of understanding that grade of instruction. We cannot in our concern for the great majority neglect the intelligent few. Many who are not fitted for university training are encouraged to go there because there seems little else for them to do. If the junior college set-up is carefully worked out, this misguidance could be eliminated almost in its entirety.

For the lower 10 per cent there must be some other solution. I am not sure that extended academic education will be of much benefit to them. Trade schools that will give them a chance to develop their mechanical skills will be the partial solution of this problem.

There is a great deal of time wasted in our educational system. But it wouldn't be wise to eliminate this waste by eliminating several years from the time pupils are under the jurisdiction of the school. Rather the wasted time should be filled with instruction that is concrete and directed toward a definite end.

From six to eighteen is not too large a proportion of human life to be spent in the preparation for living, if that living is not to be just existing. If by some means the age of eighteen could be set as the minimum for school attendance throughout all the states in the Union, I venture to say we should see some definite improvements in our economic situation as well as in the social intelligence of our citizens. Such a time may never come, but I firmly believe that it should.

Higher Salaries, Better Teaching

"The history of American higher education," says the recent report of the Carnegie Foundation for the Advancement of Teaching, "affords ample evidence of the fact that salaries paid and not salaries scheduled have had much to do with strength of teaching and scholarship in our higher institutions, especially when regarded from the point of view of the migration of teachers.

"A strong university can only be built up by assembling a strong, contented faculty. In spite of attempts to abolish competition from many phases of American life, the fact remains that competition for the best of college teachers has been advantageous to both institutions and students on the one hand, and to the profession on the other. One of the principal factors in this competition has been advances in salary upon the changing of posts.

"Leaving out of consideration for the moment prestige, pleasant associations and good working prerequisites, such as library and laboratory facilities, it is certain that the institution which in calling its teachers lets its salary schedule stand in the way of making advantageous financial offers to the man it wants will soon slip into educational mediocrity. In most instances, the salary offered to attract a strong teacher has been conditioned only by the funds available. The institution pays what it must for the man it wants, and not one cent more or less."

Two or three years ago Frederick H. Bair presented to Columbia University a doctoral dissertation, "The Social Understandings of the Superintendent of Schools." In this article he reverses his technique. Having ground down the Superintendent into a Tabulation, he now conjures the Tabulation into a Person, whom he christens Carter Saunders.

Self-Portrait

By CARTER SAUNDERS, Superintendent

WAS born forty-some years ago, Oct. 14, 1890, on a small farm in Ohio. Both of my parents came of British stock. My mother's people, the Carters, settled near Deerfield, Mass., as early as 1687, and a pioneering branch moved into the valley of the Olentangee, fifteen miles from Delaware, Ohio, on land granted as a pension settlement twelve years after the Revolution. My father, J. B. Saunders, came of Scotch stock which took root in Connecticut about 1791 and shortly branched to Ohio by way of the Western Reserve.

My father had a good, solid mind, but he dropped out of school at about the fifth grade to pursue farm work and to serve an apprenticeship in carpentering under a local genius named Gideon Main. Mother finished "common school" and went on to teach half a dozen terms before her marriage. I was the eldest of six children, one of whom died in infancy, so that the family as I knew it consisted of three sisters and two brothers.

There are a thousand interesting things that could be told of our childhood, the earliest, deepest and perhaps most ineradicable impressions of my life grew out of the matrix of the farm. Our time-sense was geared to seedtime and harvest, with the long, slow preparation of the winter fields lying between; our virtues were the primary virtues of man, as an individual, against nature.

These included labor without stint (a six or even an eight-hour day would have been regarded as sloth and sin), rough and ready resource with scant dependence upon "specialists," the geologic stratification and equally stubborn dislodgment of opinions and folk habits among a scattered, scantily and slowly informed population. The first political election that I can remember was the contest between McKinley and Bryan; we children bandied insults and our fathers voted solidly for the Ohio candidate.

I continued to receive the form and substance of life and thought in the agrarian mold throughout my boyhood and early young manhood. Indeed, except for a year and three summers in graduate work at the University of Chicago, and for two years as a teacher of mathematics in a high school near Cleveland (before I became a principal), most of my days have been spent in a rural setting or in that of hamlets or relatively small towns. The significance of this I shall return to later.

As a small boy I trudged two miles morning and evening to a four-room school in the village, which, in some mysterious form, housed the somewhat amorphous essence of twelve grades. In this respect I was considerably more favored than my remoter neighbors, who either faced a much longer daily walk to the central fountain of knowledge or betook themselves in the opposite direction to a one-room school officially and euphemistically entitled Olive Branch, but colloquially known as Buzzard's Roost.

At school, by reason of a paucity of books, we wore out the single sequence of readers and drilled droningly upon handwriting, spelling and arithmetic. With most of the farmers in our community, reading was regarded as pretty much a waste of time and newspapers were relatively scarce or unknown. My mother, however, encouraged us to read everything we could get our hands on, which was not a great deal, and father was tolerant if not actively encouraging. We had a big family Bible full of pictures over which I pored for unnumbered hours. I recall with gratitude a time when I broke my arm and so came at the library of the village doctor. From him I borrowed freely over a number of years and read pretty well from cover to cover an almanac; Aesop's Fables; John Halifax, Gentleman; The Three Musketeers, and Macaulay's England and Lays of Ancient Rome. The most notable lack in our reading or study was the almost total absence of any science worthy of the name.

On Sundays, bathed and oppressively dressed in our Sunday clothes, we went to church, whether by storm or sunshine, and to this day I have never fallen out of this habit, nor out of a way of regarding the Sabbath as the first day of the week and a time for gathering oneself for new effort and aspiration, rather than as a hangover and catch-all from the week before. I suppose that we, and people of our kind, represent as thoroughly as any survivors the tenacious thrust of Puritanism conditioned by persistent rural conditions, amid the garishly colored confusion of metropolitan America.

With the sturdy and sacrificial help of my parents, all of us, with the exception of one sister who married early, struggled through a small, denominationally generated, coeducational college. I majored in mathematics and by good luck rather than design stumbled into one immensely fruitful course in American history. It exploded the passive complacency and righteousness of my earlier mislearnings in this field and it made me dimly aware of the immense changes that were hurrying forward and dimly suspicious that they might sometime call for more direction than the law of gravity and unbridled competition might give them. Perhaps, most of all, this course gave me some glimpse of my own appalling lack of grounding in the whole field of the social studies, as applied to the accumulating problems of our lusty and careless young democracy, and of the relatively even more abysmal innocence of the great mass of my fellows. The theme song for this period, when the prairie schooner had become the Great American Band Wagon, might well have been: "O, I don't know where I'm goin', but I'm on my way!"

Finding My Life Work

College was interrupted by a year of enforced teaching, and before I had finished that first term with a group of eager, friendly boys and girls, I knew that, whatever the weaknesses in my preparation, I had

found my life work. As I grew older, and bid farewell to youth, which is the first asset in work with young people, I become increasingly aware of the tragic shallowness, aimlessness, and inadequacy of my own education, but I believe even more strongly that more light is the first and by all odds the most important business of a free people.

In my view, teaching, along with healing, and except for successful manipulation of the biologic improvement of the breed (of which we have only the feeblest foreglimmer to date), is the most significant job in the world. It would be better if it were good or great teaching, but even starved, stunted, timid, feeble and downright poor teaching is a great deal better than none.

In my particular field of school administration, the emphasis during the last twenty-five years has been upon mechanical aspects: statistical measurement, a cleaning up and standardizing of the free-for-all mess of accounting, better foresight and less waste in building—on the whole, the definition and refining of indispensable tools, but, as one looks around and ahead, only fragmentary foundations for the real business. What confronts us now is not merely "How shall I administer?" but "What am I administering for?"

Seeking Social Direction

The American school executive is more than anything else in need of integrity and clarity of social direction. I say all this with the utmost good nature, recognizing the importance of the techniques gained. We muddled a lot in defining them; the lads who came after us ought to be able to economize at least half the time we took in mastering them, and to get on to the riper consideration of the purposes to which they are to be applied.

For eighteen years now I have been teaching or practicing the emerging profession of school administration in the field. During that time, I have taken unto myself a wife from my college days, and we have two children, as against my father's six. Perhaps at that it is a severer problem for us to see them through than it was for my parents. I feel for my work the effects of a lack of wide, leisurely and liberalizing travel. The five shifts I have made, by way of a precarious professional advance, have been with one brief exception within the borders of one state.

The practice of the Department of Superintendence of meeting in various sections of the country has allowed me to visit Boston, New York, Minneapolis, Detroit, Chicago and New Orleans. Years ago my wife and I made one trip to the summer meeting of the N. E. A. at Berkeley, Calif. Sometimes, however, it is borne in upon me that as the responsible leader of the education of successive hundreds and thousands of growing citizens of the world that is to be, I have seen painfully little at first hand of the world as it is.

Lack of Esthetic Experiences

I am conscious, too, of another limitation in the lack of esthetic experiences in my life. Great music, great drama and great art come occasionally within arm's length if I could but make my energy and my physical vitality reach for them, but poverty and chores crowd them almost entirely out. I am so busy doing things that I have scant time to be somebody.

Now I am in Centerville, a kindly and in most ways comely community of 9,500 population. It exists by reason of a good farming country, of two little factories, and a creditable small college which, because of our children now in high school, is above anything else the reason for our being here. The schools have a staff of sixtyseven teachers and an enrollment slightly above 1,800 pupils. My salary began here at \$4,500 in the lush days of 1929, and is now \$3,300. On the whole, though, we get on very well, and, barring unforeseen contingencies, this will probably be my last

By the law of averages, I shall go on for sixteen years and retire from the superintendency at sixty. I have been president of the local Rotary Club, I am on the Y. M. C. A. board, an inactive member of the Masons, secretary of the Winter's Tale Club (a round table of professional and business men) and one of the active fathers of the Boy Scout organization.

Professionally, I belong to the N. E. A., Department of Superintendence, the State Teachers' Association and the County Schoolmasters' Club. At various times I have been active in church work and I speak continually on every conceivable subject to every conceivable audience, without pay, usually furnishing my own transportation. Several times I have appeared on the state programs of educators and twice on the national; I try to write a little and have published half a dozen articles in the state teachers' journal.

I have lived through two great periods in the history of my country, and am called upon to lead in some significant degree the influences of education into a third. My roots are struck in the farm period and my inheritances date from before the World War; socially, and unless I can perform the miracle of adaptation demanded, I am as outdated as Stegosaurus. Even during the immense flourishing of the individual phase of industrial capitalism, I have lived and worked for the most part in rural or semi-rural environments, although confused impressions of fundamental changes occurring in our society have been opened up to me, as to everybody else, by fragments of travel, by the press, by the radio and by the interpenetration of countless individuals into my particular segment of American life.

Since the breakdown of the economic structure in 1929, I have been increasingly conscious that I and my colleagues in education, in our proportion with leadership in government and in economics, must have been blind leaders of the blind. A public education that admits of a World War which may yet prove to have sunk our civilization and of a depression which leaves one-fourth of our workers without work and which in

its wake finds us with little or no program of remedy, certainly leaves much to be desired.

The schools must press boldly for three things: mastery of the skills of learning, the pursuit of beauty, and an immense enlargement of social understanding. In the field of social understanding, the training of school executives and of all teachers, the time given from the kindergarten through the university, and the emphasis upon contemporary conditions and problems must be very greatly increased.

For such an education the leaders, in the persons of the superintendents of schools, are miserably trained, but salvation for them may lie in the compelling consciousness of a social need that transcends their individual limitations.

Still in the Strait-Jacket

EDUCATION should not only be training to gain a livelihood, but it should be a rich experience in the art of living. True education should be concerned with life itself; it should be joyous, vibrant and realistic. In these thrilling times of fundamental changes in our national institutions, certainly the school must be prepared to train youth to live realistically in a real world.

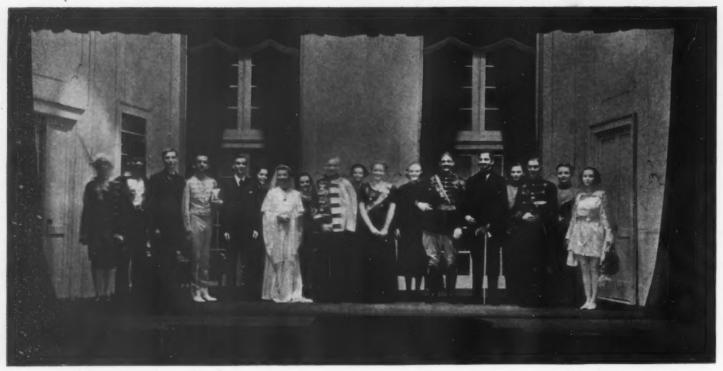
Unfortunately, however, in spite of the many progressive school systems throughout the country most of our schools are still in the lock-step of tradition. The curriculum is still in the strait-jacket. Many still worship the little red schoolhouse and the sacred 3 R's. We threw out the so-called fads and frills when we needed them most during the trying years of this depression. We must change our points of view. The social studies, music, avocational education, recreation become the essentials in this New America and this New Day.

American life today needs integration most of all. We have no focal points; we are drifting. We have become opportunists. We must stop our wishful dreaming and do some realistic thinking. The child must deal with real issues. Even in arithmetic he must meet everyday problems that give meaning and satisfaction. Wallpapering a room without doors and windows is idiotic. Cube root has no meaning today.

By JAMES EDWARD ROGERS

So many of our school problems are artificial and without significance to the pupils. The great need is to develop integrated personalities, but much in school life works against this. The administration of grades is split up into segments; subjects are put into departments; teachers have become specialists; subjects have been split into pieces; pupils are cut into slices. In one situation many teachers operate on one pupil while in others each pupil works under many teachers. Work and play are separated. Theory and practice are divided. In brief, one of the great needs is for education to be integrated itself. However, there are many efforts in the country working for the integrated personality through the integrated school curriculum, and these should be multiplied.

Education is functional. It is a process of learning through doing, achieving and living. Our attention should not be devoted solely to the development of skills and techniques but should be given to the handling of life situations as a whole. We still separate the school from the community and this distinction is a pernicious one. We still have the cloistered attitude of monastics who live apart from the community. This should not be because they are one and the same. Society has given a mandate to both school and community to foster a richer and finer living in America.



The Queen's Husband

"Dementia Peacock"

ITH the growing prominence of extracurricular activities in the program of the secondary school, and the growing conviction that those activities represent a genuine educational opportunity, there arises a venerable and pervasive problem. In the realm of indulgence this problem is called "temperance," and in the realm of business it is known by the longer and less controversial expression "greatest profits with least expense."

Such things as athletic contests and public dramatics do not force either participant or spectator to wait one, two or twenty years for high-power satisfactions by way of reward for well doing. The motivating pay-off is immediate. It floats over the sidelines or the footlights in the form of applause, strong medicine for sixteen-year-old players and for their more mature coaches. It registers in the nervous systems of all concerned, in

No cases present in high school with short practice periods for activities

By HEBER HINDS RYAN

terms of exhilaration, exultation, release of excess energy. The color and pageantry of these events set them apart from "subjects" and put them in a category which the youngster labels "immediate values." Even the most studious chap, practiced in finding thrills in intellectual conquests, may be raised to higher voltages by membership in a debate team or in the cast of a play.

All this, reenforced by the intent scrutiny which the public gives the matter, swings the pointer of emphasis toward the extracurricular program. Many a school does a more painstaking job of its football skills than of anything else. Time and thought are expended with great prodigality in the hope of achieving

that last ounce of expertness which makes the difference between victory and defeat. Thus temperance becomes an issue.

Often it turns out that the coach, in his anxious desire for the optimum showing, defeats his own purpose by overdoing the thing. The basketball coach gets his squad out in October, and from then until the end of the season they charge hither and yon, up and down and across the floor, three hours a day, six days a week, perfecting plays, dribble-in shots and fast breaks. Or, as the night of the senior play approaches, the dramatic director, dissatisfied with the progress

to date, begins to tear his hair, puts on more pressure and prolongs rehearsals late into the night. In either case the coach forgets that the players are young, and that they are characterized by accelerated change rather than sturdy ruggedness. Their response to this overtraining is usually a spiritless performance.

Another result of this intemperance is the excessive fatigue and preoccupation of the players during the evening and the school day. There should be no misgivings over the fact that red-blooded lads habitually spend the late afternoon hours in athletic sports. Vigorous exercise, followed by soap and water, is probably the best use those boys can make of the period between school work and dinner.

The damage comes when the manner of conducting the sports incapacitates them for effective study in school and out. If the boy comes wearily home to dinner, dozes for an hour afterward and then crawls into bed; if he sits on his belt through all his classes; or if he thinks athletics all day and dreams it all night, then he is to all intents and purposes a professional athlete without pay. The majority of the opportunities that the school offers are passing him by.

Wisconsin High School at the University of Wisconsin has been forced by circumstances to explore the possibilities of reduced schedules of practice. Ours is a tuition school; we must compete for patronage with excellent public high schools whose equipment is superior to ours. We are thus compelled to carry on as broad and satisfying an extracurricular program as possible. As in any small school, the activities overlap, and there are conflicts of time, space, facilities and personnel. Not all the desirable activities can be maintained if each makes unlimited demands upon the afternoons of its participants. The compromises thus brought about have taught us something about economy of time.

The basketball season of 1930-1931, for example, was something to ponder over. That year we won the state championship, for which the

In line with the general policy the cast of "Big Hearted Herbert" held its dress rehearsal at least forty-eight hours in advance of the opening performance. The same policy of restricted training is followed in football and other sports. schools of the state competed in a single class. Our standard weekly practice schedule was as follows: Monday, light practice; Tuesday, 50 free throws per man (ten minutes, perhaps during the noon hour); Wednesday, hard practice; Thursday, 50 free throws; Friday, a game. This routine not only carried the team through the main season of sixteen games, but put it in condition for the district and state tournaments. In each of these tournaments the team played one game a day for three days.

We play football and basketball in a conference of six schools, of which we are the smallest; the largest has about four times our enrollment. We are always in "first division" in football, and in all but one of the last six seasons we have been conference champions or co-champions in basketball; that one year found us in second place.

We have obviously not been under serious handicap. I am convinced that the reduced schedule of practice, inaugurated six years ago by the former coach, Russell Rippe, and continued by his successor, Clyde Knapp, is the plan best suited to our boys and probably to the typical high school boy of today. Cutting down the time has



not meant loss of effective development in sports.

Our directors of dramatics and music, Dr. Lowell Lees and Mrs. Helen Rector, have observed these events and have adapted the idea to their own problems.

For example, it is the policy of the instructors to arrange the final dress rehearsal so that there is an interval of forty-eight hours between that and the public performance. It has not always been possible to stick to that policy. We must go outside our own building to get an adequate stage, and we must take the dates that are available. But the most finished performances have been those which followed the planned forty-eight-hour interval.

The reason for this is plain enough. The best kind of training is not that which uses the pupil as a phonograph on which to play an imposed rôle. It is rather that which leads the pupil to grow into the spirit of the character or to catch the spirit of the song. If the rôle has come to be, for the time being, a part of the personality of the pupil, he will play it best when he is freshest and otherwise at his best. What he has memorized is less important than what he is ready to express.

The advantages of such a plan to the pupil are many. For example, by stopping his drill short of the point where excessive fatigue and disgust begin, he may hope to enjoy the enterprise to the fullest. The team that "does not like to play" is a harddriven, overdrilled team. The actorsinger who gives expression to himself rather than to the coach has an experience that brings him growth. Again, if the player can do his part well with a reasonable expenditure of time, he can hope to go also into other kinds of activity and so broaden the scope of his leisure time occupations.

From the standpoint of the purposes of the school, the superiority of shortened practice is obvious. If these activities are of genuine value, it is important that their benefits be as widely distributed as possible. The boy whose extracurricular experiences are exclusively athletic, or exclusively dramatic, or whatnot, is missing something. We should reduce the time cost of all these to make a wider participation possible.

Another point of superiority lies in the lesser likelihood that any activity, as for example athletics, will be overemphasized. If that activity is not allowed to monopolize the time and attention of pupils, and if the gymnasium or stage is frequently used by pupils not in the varsity squad or the "big play," a better perspective is the result. Finally, wider participation prevents the uninterrupted centering of the limelight upon stars or would-be stars. Applause is strong medicine; it sometimes produces terrible cases of what might be called "dementia peacock."

In short, our experience at Wisconsin High School has led us to believe that coaches can accomplish even better results than those of the past by devoting less time to a given player, and that in the wake of such a reduction of time there follow unmistakable benefits to all concerned.

Outdoor Science in Ninth Grade

By RUTH KIRKLAND

CLASS in Science of the Out-A of-Doors is now being offered as a ninth grade elective at Jefferson Junior High School, in Long Beach, Calif. After some investigation of the field of outdoor science, the class determines the fields of interest that will be explored and studied during the semester. Class interest is a prime factor in determining the time spent on each unit of work. The work is so organized that, while the class as a whole works on a core of minimum requirements, each pupil extends his own investigation into some more specialized field of the unit. Out-ofclass work and some of the class periods, after the unit is well launched, are devoted to these individual investigations. Sometimes this results in natural interest groups, sometimes in continued individual work.

Field trips, including half-hour neighborhood walks, tree walks in parks, bird trips to parks and shore, half-day excursions to more distant points for field study of rocks, trees, flowers and sea-life form a part of the class work.

Each pupil spends part of the semester working on a term project of his own selection. This may be a further investigation of some class unit or an entirely different topic. The results of the investigation are presented in the form of a report to the class, a notebook or a collection.

Units of work that have been studied at some time during the four semesters the class has been in existence are:

- Aids to the Enjoyment of the Out-of-Doors (including development of the primary senses, outdoor library, camera, field glasses, camping equipment, hiking equipment and practices, camp menus, trail first aid, maps).
- 2. The Changing Surface of the Earth.
- 3. Rocks and Minerals.
- Birds (two short units, one for the fall and one for the spring semester).
- 5. Shore Life.
- 6. Wild Flowers.
- 7. Trees.
- 8. Forests.
- Survey of Possibilities of Nature Exploration in California.
- Survey of Possibilities of Nature Exploration in Western National Parks.

Other units, prepared but never adopted by the classes so far, include units on insects, reptiles and amphibians. They may come later.

Enforced Celibacy in Schools

By M. M. CHAMBERS

the married woman teacher was becoming an issue. As the dread incubus of unemployment extended its horror over the land, in many localities there was a tendency for envious job-seekers and their friends to turn upon her in a species of hysteria, and in hundreds of instances the school authorities were stampeded into enacting rules designed to purge married women from the ranks of the teaching corps.

In many places such rules are now in force. In several states their validity has been tested in the courts of last resort, and the full story of the decisions is far too long to be told here in detail. In any state the result depends upon the precise wording of the school statutes, as well as the particular interpretation thereof adopted by the court; the latter is well known to be in some degree a product of the social predilections of the current judges.

More often than not the regulations against married women have been upheld, on a line of reasoning somewhat as follows: Whether or not the exclusion of married women actually conduces to the welfare of the schools is a hotly debated question on which there are honest differences of opinion; therefore the issue, when not expressly covered by existing law, is one of policy to be determined by the board of education. The courts cannot usurp the legislative power and invalidate a regulation merely because they doubt the wisdom of it.

Two recent decisions in New England adhere to the foregoing principle and enunciate some interesting reasoning.

Says the supreme court of the state of New Hampshire: "The school

board has the duty to base all its official acts and conduct upon the welfare of the schools and in the interests of local education. Economy in the management and conduct of the schools is a proper consideration, but economy in other branches of government is not. If the regulation was adopted because the board thought it would help to meet general demands in economic and social conditions, the motive was improper. To

The married woman teacher is still an issue. What have the courts of last resort to say on the subject? M. M. Chambers finds that judicial opinion is divided, as is also true of opinion among professional educators and laymen. Let the debate continue, says he.

dismiss a teacher in order to make room for another thought to be more in need of employment, and thereby also to relieve the strain on public relief, could not advance educational welfare. The tendency would be necessarily to impair it."

This cogent statement seems to be much more to the point than the looser language recently employed by the supreme court of Minnesota in an analogous case, when, speaking of a school board rule reserving the right to discharge female teachers upon or

¹Coleman v. School District of Rochester, (N.H.), 183 Atl. 586 (1936).

after their marriage, it said: "The board had a right to create the policy in the interests of the public welfare."2 This would seem to imply that a board of education need not necessarily place the efficiency of the schools above other considerations, but that it may constitute itself an agency to legislate locally for the general public welfare. Such an implication is quite foreign to the concept of the responsibilities of a school board hitherto built up by the statutes and judicial precedents. It may be doubted whether the idea of allowing any factor other than the best interests of the schools to take first place in the deliberations of a school board will ever be legally sanctioned or even popularly countenanced.

Though the New Hampshire court made a sound pronouncement on the foregoing point, the reader must not hasten to infer that its decision invalidated the rule against married women teachers. No such result was reached.

After a very thorough review of the state school statutes, the court concluded that the rule would be invalid and unenforceable unless it were shown to have been approved by the state board of education. This is by virtue of statutes of 1919 and 1921 which vested in the state board of education sole power to determine minimum qualifications for teachers, and also empowered the state board to supervise local regulations governing the schools, in order to avoid conflict of authority. A rule against married women, said the court, in effect establishes a minimum qualification for teachers, and therefore cannot be made by a local board without the supervision and concurrence of the state board.

^{*}Backie v. Cromwell Consolidated School District, 186 Minn. 38, 242 N.W. 389 (1932).

If, however, the state board approves the rule, it will be valid, thinks the court, because: "Although the board's motive was indefensible if it did not act with the motive to serve the cause of educational welfare and efficiency, the difference between proper and improper motive does not determine the validity of legislation, as a general proposition."

The point is that the local and state boards of education in enacting rules for the management of the schools within the scope of their authority are for that purpose the legislative department of the state and are within the general rule of law which exempts the legislature from judicial control. In other words, the courts do not presume to delve into the motives of the law-making agency when no private rights guaranteed by the constitution are involved.

The decision is tersely summed up in the sentence: "The rule (against married women teachers) would be valid if enacted by the legislature, and it is equally so if the board adopted it under authority of the legislature, with state board approval."

This conclusion was called forth by a petition for a declaratory judgment filed by married women who constitute one-seventh of the teaching corps of the town of Rochester, and who will be affected if a recently adopted rule of the local board is enforced.

Massachusetts Case

The school committee of Revere, Mass., enacted a rule to the effect that every woman teacher's contract should contain a proviso that her marriage would terminate her services. and that this clause should continue in force even after the teacher acquired indefinite tenure. A teacher was employed and served under such contracts during the years 1927, 1928 and 1929, and in 1930 was reemployed on indefinite tenure under a contract containing the antimarriage clause, to which she assented. 1935 she married. The school committee refused to allow her to teach thereafter, and, after notice and hearing as provided by the tenure law,

dismissed her for "violation of her contract and the rules of the committee."

The tenure statute says teachers on indefinite tenure "shall not be dismissed, except for inefficiency, incapacity, conduct unbecoming a teacher . . . insubordination or other good cause." The issue is whether these grounds for dismissal are broad enough to authorize the discharge of a teacher solely on account of her marriage. The decision of the court is that "good cause" in the statute is by no means limited to some form of inefficiency or misconduct on the part of the teacher, but may include any cause advanced by the committee in good faith and not arbitrary, irrational, unreasonable or irrelevant to the committee's task of building up and maintaining an efficient school system

Pointing out that the wisdom of employing married women teachers is still very generally a subject of honest differences of opinion, the court declines to interfere with the discretion of the school committee in determining what policy it will pursue in that respect. In other words, the court feels unable to hold that a rule against married women is arbitrary, unreasonable or irrelevant.³

Indiana to the Contrary

A different position has been taken by the supreme court of Indiana in two earlier cases. The statute provided that "Cancellation of an indefinite contract of a permanent teacher may be made for incompetency, insubordination (which shall be deemed to mean a wilful refusal to obey the school laws of this state or reasonable rules prescribed for the government of the public schools), neglect of duty, immorality, justifiable decrease in the number of teaching positions or other good and just cause, but may not be made for political or personal reasons." woman teacher dismissed solely on account of her marriage was granted a writ of mandamus ordering her re-

³Rinaldo v. Dreyer, (Mass.), 1 N.E. (2d) 37 (1936).

instatement, and the court made a ringing proclamation in substance as follows:

"Marriage, in itself, does not constitute a good and just cause for the discharge of a teacher. Marriage as an institution involves no element of wrong, but, on the contrary, is protected, encouraged and fostered by a sound public policy. The arbitrary determination of the school board that the marriage of women teachers was 'good and just cause' for their removal is, as a matter of law, declared to be erroneous and invalid."

In a similar case the same court held that the marriage of a teacher in disregard of a board rule on the subject could not be interpreted as insubordination, and that a board rule providing that marriage would automatically terminate the services of a teacher was unreasonable.⁵

A Matter of Social Philosophy

Thus it appears that judicial opinion on this subject is divided, as is also true of opinion among professional educators and laymen. Some earnest seekers after a solution have hoped that the relative merits of married and unmarried teachers might be conclusively determined by some sort of scientific evaluation on a scale large enough to be convincing. Such a hope is probably illusory.

It is more likely that the issue will be gradually settled by the evolution of the type of social philosophy which ultimately gains general acceptance. Shall all-round competency be the sole test for the employment and retention of teachers, or shall teaching be reserved as a haven for spinsters and immature girls exclusively? Shall we hold to the Victorian and latterday Fascist conception of woman's place in the world, or shall we adhere to the principle that it is poor public policy to bar arbitrarily any class of citizens, though female and married, from employment in a public profession in which some are capable of rendering service of the highest grade?

⁴School City of Elwood v. State ex rel. Griffin, 203 Ind. 626, 180 N.E. 471 (1932).

⁵Kostanzer v. Ramsey, (Ind.), 187 N.E. 337 (1933).

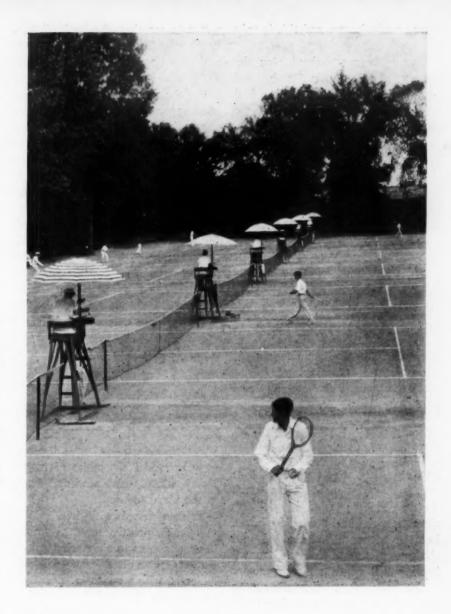
There are two points of view in sports. One applauds and encourages the boy when he shows strength of character; the other praises the one who "gets away with" something advantageous to his side.

HE Minnowa pitcher wound up and shot a quick-breaking curve that barely missed the Michiana batter. "Umpire, that ball hit him. He's entitled to first base," shouted the Michiana coach, one of our national baseball heroes. "No, the ball didn't hit him," answered the umpire. "Didn't that ball hit you?" shouted the coach to the batter. "No, it didn't," replied the boy.

The coach threw up his hands in disgust and said, "See that, we can't do a thing with them." But the chancellor of the university said, "Thank God for the home that reared that boy."

There we have the educational point of view and the athletic point of view in a nutshell. The one applauds and encourages the boy when he shows strength of character, the other applauds and lauds the boy when he "gets away with" anything that is advantageous to his side. How far coaching has helped to inculcate this point of view in sports I am not prepared to say. However, the practice appears to be more prevalent in those sports in which the influence of coaching is strongly felt than in sports that flourish without high pressure demands for victory.

The Tuthill tennis captain drove a ball close to the sideline. The Newman man stretched to get it and just managed to lob the ball back over the net, but he fell in the act and was unable to defend in the play.



A New Day in Sports

By CARLTON PALMER

The Tuthill captain needed only to drop the ball back over the net to win the point, but instead he let the ball go. The fallen opponent rushed to the net and asked the captain to accept the point. "I can't do that, but I shall be glad to replay the point," replied the captain.

The crowd applauded, but the coach rushed out: "What's the mater

with you? We want to win this match."

"So do I," replied the captain, "but you wouldn't take advantage of a man when he's down, would you?"

"It's his business to stand on his feet," answered the coach.

"It is also the business of a fighter to stand on his feet, but you would give him a chance when he's down, wouldn't you, and this is only a game?"

This reply overpowered even the victory spirit of the coach, and realizing that his point of view had been pushed too far he said, "I get you, Cap. It's all right."

If in our sports we should live up to the ideals of the boys the standards of play might approximate more nearly the ideals of education. Why educators prate about elevating the standards of the political and commercial world, about building a new cooperative social order, and yet tolerate the ethical standards of the commercial world in some of the most vital activities of school life is difficult to understand. If we achieve a better social order it will be because honesty, fair play and generous human consideration will govern our actions in politics, in commerce and in all branches of life.

Fair Play Is Applauded

In a close game Sloane had a man on third; the batter signaled that he would bunt the next ball pitched. As the pitcher started his delivery the runner on third started for home, but the batter missed the ball and the runner stopped short and turned back to third with the Powers catcher on his heels. Just before the runner regained the base the catcher made a desperate effort to touch him out, but he missed him. The umpire didn't see the play closely and called the runner out.

The catcher knew that he hadn't touched him and said, "Umpire, I didn't touch him."

"Do you mean that?" asked the umpire.

"Yes," replied the catcher.

"Thanks, I appreciate that."

The crowd applauded and the umpire walked to the sideline and said, "Ladies and gentlemen, that's the way the game should be played. We have been all wrong in encouraging boys to get away with things instead of helping them to be honest and fair and generous in their games."

These examples give us a picture of how boys wish to play, and it seems to me that if school officials, coaches and umpires will cooperate with the boys to further the social and ethical standards essential to a better social order games will be even more enjoyable and education will be more effective in training the oncoming generation as citizens fit to achieve a new social order.

Educators admit that these simple virtues are essential to worthy social life. If a pupil steals or is dishonest in the classroom they are concerned, but if his behavior on the athletic field outrages the same principles they may consider him clever.

Why? Because the average school man was taught the same philosophy of sports. They, too, were told by the coach that when they failed to tag a runner coming into a base not to make a second attempt to touch him for the umpire would see the mistake; they were to turn to the umpire quickly as if they had touched the runner out in the first effort and so win the decision. These schoolmen grew up under the ethics of rugged individualism which works so badly in the world today.

I have talked with hundreds of schoolmen, pointing out the foregoing experiences to show what can be done in sports if educators will take ethical teaching seriously, and I am sorry to say that with few exceptions coaches, principals and superintendents have replied with a smile. They are thinking of their own experience in sports. Down in their hearts, however, they are deeply concerned about better standards in life.

Unnecessary Luggage

Athletics is one department of school life with which schoolmen are too often out of touch; they leave it to their subordinates, who are governed by the demands of the crowd. A cartoon appeared on a sporting sheet some time ago in which two college presidents stood in the stands at a football game lauding the social and educational values of these great contests, while on the gridiron 200 feet away the two teams were huddled about their respective coaches

working up spirit and determination by condemning the opponents,

In contrast to this attitude a New York paper, in describing a game between Yale and Columbia toward the close of the last century, stated that there were no officials and that nothing unbecoming a gentleman took place in the game. Since then the game has taken on much unnecessary luggage in the way of officials who lack the educational point of view. Coaching increases the demand for officials, and they are seldom concerned about standards. Few have the vision of the man who thanked the catcher for being honest. If officials exerted an educational influence the boys would soon be able to play their games without sports' police. This is evident in contests in which high pressure coaching is absent.

The weakness is, as indicated in the case of the two college presidents, that schoolmen don't know what is going on; they are too far removed from the field where character is marred or made. Often they, too, covet the plaudits of the mob and lack the courage to exert the necessary leadership and influence.

Sports Are Out of Key

Schoolmen feel that they solved the problem of sports when they took the activities out of the hands of pupils and turned them over to the faculty. What they really did was to put the sports into the hands of coaches and then turned away and ceased to be concerned.

That school people fail to see how far the standards perpetrated in sports are out of key with educational aims goes to show how far they are out of touch with the actual situation. All the prattle of educators about educating for a new social order is empty talk while the worst practices of the old social order govern the spirit and the ethics of school sports. It is not enough that educators talk a new social order. What are they doing about fundamental changes to make possible a new social spirit through the practices in school life?

Light Loads and Heavy

HE method used to obtain the necessary data for a study of the teaching load in Montana high schools, 1933-1934, was a request sent to the superintendents and principals of all the high schools in the state. This letter asked for a copy of the class schedule showing the number of pupils in each section, the length of the class period, the number of periods the class met per week, the number of periods each teacher spent in noninstructional activities, such as study hall and library duties, and the estimated number of hours spent per week in extracurricular activities. Data on the number of years of teaching experience and the salaries were obtained from the state department of education.

Replies were received from 91 of Montana's 213 high schools. Information was lacking or given in such a form that it could not be used for seven schools. This gives 84 schools, or a percentage of 39.4 of the schools of the state, for which replies were usable in whole or in part.

In Table I is given the number of replies received according to the clas-

Measurements in Montana High Schools

By HARL R. DOUGLASS and WILLIAM TAYLOR

sification of schools. It will be noted that the larger schools have a much higher percentage of returns. This would indicate that although only about 40 per cent of the schools replied the number of teachers covered by this study would be relatively greater.

This is found to be the case as Table II indicates. The total number of high school teachers in the state is 1,329 and this study covers 767, or 57.7 per cent. It will also be noted that data on all the teachers of the first class schools and a majority of the county and second class schools are included. However, only about 30 per cent of the data of teachers in the third class and 18 per cent in the parochial schools were available and usable. So it must be kept in mind in later discussions that the loads of the third class and parochial schools

may not be so representative of their respective groups as the larger three classes of schools.

In the tables that follow throughout this report, the numbers of teachers in each group will not correspond with those in the foregoing table, but are smaller in every instance. This discrepancy is due to the fact that all replies were not complete or could not be safely employed on all points in the questionnaire.

The information requested in the letter sent to the schools could all be given in definite terms except that relating to the time spent on extracurricular activities. The copy of the class schedule gave exact information concerning the number of classes, number of study hall periods and the subjects taught. If the principal took the trouble to answer the request, he more than likely filled in the correct number of pupils in each class.

The last question asked for an estimated number of hours spent per week on an average throughout the year in extracurricular activities. In examining the replies it could be seen that in some cases the superintendent or principal had made the estimate for each teacher, and in other cases the teacher had made his own. When the estimate had been made by the administrator, he may not have known just how much time the teacher actually spent on his activities. On the other hand, the teacher writing in the number of hours might have a tendency to pad his figures. A great range was found in the time spent by different teachers in the same activity. For example, one teacher spent five hours a week coaching athletics while

Table I—Distribution of Replies According to Classification of Schools									
Class of School	Number of Schools	Number of Replies	%	Usable Replies	%				
First Class	5	5	100.0	5	100.0				
County	20	12	60.0	11	55.0				
Second class	52	27	51.9	27	51.9				
Third class	125	40	32.0	38	30.2				
Parochial	11	7	63.6	3	27.3				
Totals	213	91	42.7	84	39.4				

Class of School	Number of Teachers	Number of Teachers Included in Replies	%
First class	224	224	100.0
County	255	195	76.5
Second class	359 430	201	60.0
Third class	430	136	31.6
Parochial	61	11	18.0
Total	1,329	767	57.7

another in a school of approximately the same size put in fifteen hours. The fact that the instructional load is more reliable than the noninstructional load is one of the reasons that the two are kept separate in the tables.

There are four classes of public high schools in Montana. The divisions are based on population of the school district. A first class district must have a population of 8,000 or more, a second class a population between 1,000 and 8,000, and a third class is one under 1,000 population. In addition to these, there are county high schools which are usually located in the largest town of the county and which enroll pupils from that town and from the rest of the county except districts having their own high school. Only twenty of the fifty-six counties have the county high school. Parochial schools include all religious and private schools. So that comparisons with schools in other states may be facilitated, the schools in this study have the following range of enrollment:

First class: 480 to 2,030, with an average of 1,222.6.

County: 220 to 1,240, with an average of 545.5.

Second class: 75 to 510, with an average of 195.7.

Third class: 15 to 102; with an average of 59.3.

Parochial: 40 to 52, with an average of 47.8.

The term "instructional load" covers all phases of the actual teaching of classes including preparation and correction of papers. "Cooperational load," or extracurricular load, stands for all the activities that are not directly concerned with class instruction. This will include such duties as study hall and library supervision, class sponsorship, taking charge of school publications, directing class plays and coaching athletics. Total load will be the sum of the instructional and the cooperational loads. Teaching load is used as a synonym for total load.

By subject field of a teacher is meant the field in which an instructor

TABLE III—TEACHING LOAD BY CLASSES OF SCHOOLS (Entries in Terms of Douglass Teaching Load Units)

Unit Load	First Class	County	Second Class	Third Class	Parochial	Total
Totals	205	134	165	82	9	595
Instructional Load:						
Mean	27.87 28.64 26.33 30.35 2.01	27.89 28.00 25.50 30.36 2.43	27.82 27.52 25.48 30.20 2.36	26.72 26.89 23.90 29.56 2.33	28.17 27.75 26.63 28.88 1.12	27.71 27.98 25.52 30.19 2.34
Cooperational Load:						
Mean	2.12 1.82 .63 2.73 1.05	5.14 4.52 2.88 6.75 1.94	6.03 5.78 3.42 8.13 2.36	6.23 6.13 4.46 7.94 1.74	6.06 5.25 4.13 8.75 2.31	4.51 3.90 1.83 6.59 2.38
Total Load:						
Mean	29.81 30.08 27.86 31.88 2.01	33.04 32.79 29.82 35.50 2.84	33.71 33.58 30.66 36.48 2.91	32.95 32.78 29.95 35.50 2.78	34.28 32.50 30.42 39.38 4.48	32.12 31.93 29.27 34.67 2.70

TABLE IV—TOTAL LOAD BY SUBJECT FIELDS (Entries in Terms of Douglass Teaching Load Units)

Subject	Mean	Median	Q_1	Q_3	Q
English	33.10	33.14	30.33	35.45	2.61
Science	33.01	32.94	30.54	35.08	2:23
Social science	32.87	32.69	30.18	35.38	2.60
All	32.12	31.93	29.27	34.67	2.70
Commercial	31.94	31.70	29.25	34.32	2.54
Mathematics	30.99	30.21	28.22	33.45	2.60
Language	30.70	29.93	28.55	31.85	1.65
Ind. arts	30.42	29.17	27.06	34.25	3.60
Home economics	29.68	30.67	26.50	32.50	3.00
Music	27.93	28.25	27.38	31.25	1.94
Physical education	27.50	27.00	22.50	31.50	4.50

does at least one-half of his teaching. If the teacher's subjects are divided into two equal divisions, he is not counted in either field. For example, if he has two classes in mathematics and two in science during the day he would not be counted in either field, nor would two classes in mathematics, one in science, one in language, and

one in history constitute any one field. However, a teacher having two classes in mathematics, one in science, and one in history would be counted in the field of mathematics.

As a means of measurement of teaching load a formula developed by one of us [H. R. D.] was employed. It is given below.

$$\mathrm{TL} = \mathrm{SC} \left[\mathrm{CP} - \frac{2 \, \mathrm{Dup.}}{10} + \frac{(\mathrm{NP} - 20\mathrm{CP})}{100} \right] \, \left[\frac{\mathrm{PL} + 55}{100} \right] \, + \, \frac{\mathrm{PC}}{2} \left[\frac{\mathrm{PL} + 55}{100} \right]$$

TL = Total units of teaching load per

CP = Number of periods spent in class per week.

Dup. = Number of class periods spent per week in classroom teaching classes for which the preparation is very similar to that for some other section, not including the original section.

NP = Number of pupils in classes per week.

PC = Number of class periods spent per week in supervision of study hall, student activities, or other cooperations.

PL = Gross length in minutes of class periods.

SC = Subject coefficient. English, science, and social science — 1.1; languages, commercial subjects, and mathematics — 1.0; all shop subjects, household arts, and art — 0.9; music and physical education — 0.8.

Inst. Load: -	Men	Women	Total
Mean	27 . 21	27.88	27.64
	27 . 63	28.16	28.00
	24 . 67	25.84	25.31
	30 . 25	30.29	30.27
	2 . 79	2.28	2.48
Coop. Load: Mean Median Q1 Q2	5.40	3.86	4.42
	4.57	3.21	3.65
	2.19	1.09	1.56
	8.08	5.81	6.55
	2.95	2.36	2.50
Total Load: Mean Median Q1 Q3	32.65	31.59	31.98
	32.71	31.33	31.75
	29.50	29.00	29.13
	35.45	33.97	34.54
	2.98	2.49	2.72

The application of the formula yields results in "teaching load units (TL)." A teaching load unit is theoretically equivalent to teaching one period a class which requires preparation, in which there are twenty pupils and which meets for forty-five minutes. It must be kept in mind that a load unit is not a measurement of time, of number of pupils or of classes, but it is a distinct unit, meaning the amount of all the work required in teaching a class of twenty pupils based on a class period of forty-five minutes.

To facilitate comparisons in this study, the formula was divided into two parts, the instructional and the cooperational load, the total load being the sum of these two. The formula for the cooperational load was changed slightly for use in this study better to adapt it to the replies on the questionnaire. The formula as given treats the cooperations in terms of periods, while the replies gave the amount of cooperations in average hours per week, except, of course, such periods as study hall and library supervision, which were given in the regular class schedule. If the number of hours were converted into periods per week and then calculated it was found that the number of cooperational units would vary according to the length of the period.

It was found, as stated previously, that the pupil load and the class load do not measure the same thing. The question then arises, how closely do the units from the Douglass formula correspond to the pupil load, the class load or a combination of the two? To determine this, correlations were made between the formula units and the other measuring units.

The coefficient of correlation between the formula load units and the number of class periods taught by 595 high school teachers is .45. Even less correlation was found between the number of pupils and formula units; the coefficient was .16, practically no correlation at all.

In agreement with the findings in other states as reported by Saupe, Quanbeck and others, the smaller the school in Montana the greater the load (Table III), though the differences are not great between the various groups of Montana schools.

Even greater differences are found between groups of teachers of various subject matter fields. Leading the list, in point of size of load, were the English and the science teachers, followed closely by the teachers of the social studies (Table IV). The teachers with light loads were those in physical education and music, owing largely to the low coefficient assigned their classes in the use of the Douglass formula.

Men carry slightly heavier loads than women. As indicated in Table V, this margin is attributable to the
 TABLE VI—TEACHING LOAD OF BEGINNING AND EXPERIENCED TEACHERS

 (In Terms of Teaching Load Units)

 Exp.
 Beg.
 Total

 Mean
 31.75
 33.76
 31.88

 Median
 31.48
 34.36
 31.61

 $28.91 \\ 34.19$

30.58 36.42

28.99

34.40

TABLE VII— of Ar (In Terms of	DMINISTR	ATORS	
	County High	Supt. 2nd Class Schools	
Mean	5.86 .92 .46 12.13 5.84		24.30

greater cooperational load, as women carry slightly heavier instructional loads.

As shown in other studies, the beginning teacher, contrary to common sense and good school management, is given a heavier load than her more experienced colleagues (Table VI).

In Montana, a state of many small schools, principals almost invariably and superintendents usually are also teachers. No attempt was made to measure the cooperational load of administrators. Data on instructional loads are given in Table VII.

Pupils Give Teachers Day Off

Pa., recently opened school in the morning, conducted all of their classes and closed it in the afternoon without benefit of faculty. Student committees assumed administrative control, home room chairmen conducted home room sessions, and designated chairmen conducted classes and study periods. With the exception of shops, laboratories and gymnasiums, where teachers guarded against accidents, there were no members of the faculty in the building.

Definite planning made the day a success. Preliminary preparations

included talks in assembly to develop mind set for responsibility; the taking of an oral honor pledge by the pupils; teacher-pupil cooperative selection of class leaders, and, finally, a practice day.

During the day itself, teachers visited other schools, in groups and singly. Aside from this definite gain, the objectives achieved through the day were two-fold: teachers developed a new sense of respect for and confidence in their pupils, while pupils developed responsibility, self-respect and trustworthiness, and respect for their own leaders.

Happy to Say

By WILLIAM McANDREW

THE superintendent who knows where good teaching is ranks high among school executives. Too many are disposed to show buildings and equipment when they escort visitors around. To do this is to exalt the supplementary. What we want to see in any productive system is the making of the goods. When a visitor asks, "May I visit schools?" he ought to be told where he can see high-class teaching. B—— has a list for this purpose. "Here is my best arithmetic," he says, "my livest history, the brightest activities' program." A superintendent who superintends never lets the saw logs loom larger than the Hopkinses.

THE elation that comes on the successful completion of an important task need not be a rare piece of infrequent luck. A man can start the day by listing one or more worth while things to be done before nightfall. The pleasure of Boy-Scout keeping of a day's promise is more intense in a man. To have some occurrences you are master of instead of being driven by outside circumstances is to find in life a zest beyond compare.

"HE HAS the manners of a prince," "as courteous as a Chesterfield"—such comparisons are common. Not until we hear the world saying "as well bred as a schoolmaster" can we be content. No one has more occasion for practice in the gracious art than we—with children, teachers and the general public coming with complaints. We can take examples from higher officials in business organizations. The bigger the man the more considerate is he of others. Channing Pollock's observation that the most respected is the best respecter finds confirmation when we observe the biggest men and women in our own profession.

TO RIDE high horse is a tempting and contemptible sport for an educator when undertaking to correct a child, a teacher or a student. No big man does it. It makes a small one look smaller. If the lasting hatred generated by such performances were distilled from all the victims into one big vat it would flame to beat hell. Such discipline never cured a conceited culprit and has blighted the necessary self-respect of the worthy. Lord knows we need to train more folks to hold up their heads in the face of the ranters who press the compliant into submission.

KNOW a bright young woman who has an original habit of saying to a hostess at the beginning of a party, (instead of waiting till the end to pay compliments), "We are going to have a delightful time." It would pay a teacher, a principal or a superintendent to say that to himself as the day's work starts.

ONE crêpe-hanger in a teaching staff can reduce a principal's general efficiency 50 or more per cent. After you have tried other psychologic maxims to soothe yourself you can get much strength out of the old stand-by: "Don't give a dam.*"

The old type truant officer has no place in a modern program of education. We have passed the point where brute force should be the means of bringing the nation's children to school. We know more about child nature and how he responds to various stimuli than we knew a few years ago.

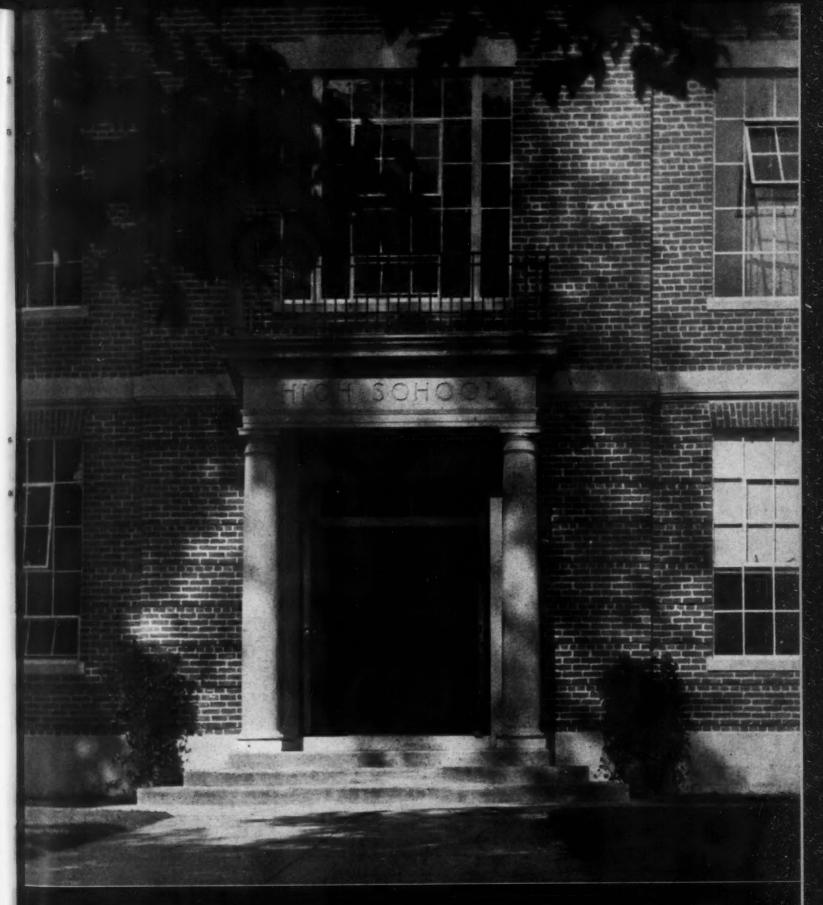
We know that if a child is absent from school there is a cause. That cause may be a poor school program, a poor home background, a poor physical condition, an unsatisfactory parental, teacher or playmate attitude, or some mental upset upon the child's part that makes school attendance an unsatisfactory or unhappy experience. We know that forced attendance at school with no attempt to discover the cause of the nonattendance is likely not only to result in no educational progress but to force the child into more serious forms of social misconduct.

During the last ten years I have had happy contacts with many present day truant officers who have a modern approach to the whole problem of improving school attendance. I have, on the other hand, met many who follow practices outmoded years ago. The former, long since have ceased to be truant officers though they still retain the name.

It is little less than a disgrace to force competent, highly trained men and women who are performing a technical service in pupil guidance and management to continue to wear the insignia of an antiquated political and police service. It would seem that the truant officer should go and that a professionalized educational and social worker should legally be made responsible for the improvement of school attendance.

If state legislation is needed to accomplish this end those interested in the problem of preventing truancy should take whatever steps are necessary to secure its passage. In cases in which legislation is not necessary local school people should see to it that workers skilled in social and educational work replace the old-time police officer.—Arch O. Heck.

^{*}A. portion of clay used in preventing waste of hot solder.



THE SCHOOL PLANT



One District Solves High School

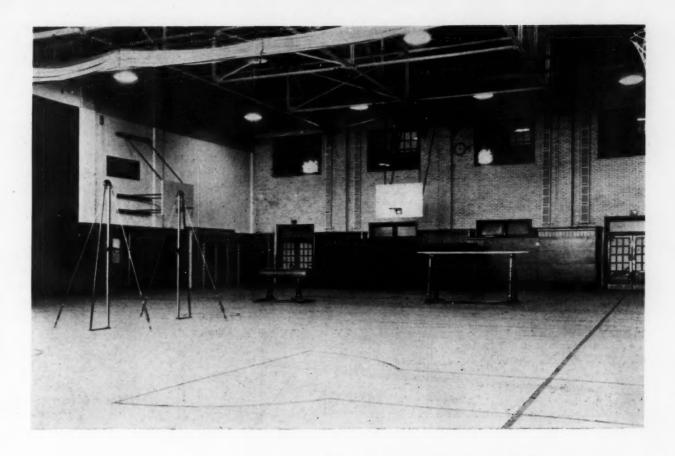
By ALFRED M. KORFF

IX years ago it was necessary to send high school pupils of Dunellen, N. J., to a neighboring community where they were assured ample educational opportunities. As enrollment increased, however, this high school could not receive or instruct any additional pupils. A regional high school was considered, but because of various local conditions, the idea was abandoned. After due consideration and consultation, therefore, the board of education decided that the best and most economical procedure would be to build a high school addition to the existing Roosevelt Junior High School. This was made available by a \$85,000 grant and bond issue from the Federal Emergency Administration of Public Works.

The original building contained many rooms essential and preparatory to high school work, such as cooking and sewing rooms, manual training, lumber storage and project rooms, art, music, spelling and penmanship, languages, mathematics, English, history and library rooms, with five additional classrooms for miscellaneous studies. In the original school, too, were teachers' rooms for men and women, private offices for the supervising principal and high school principal, a board room, and ample storage rooms and toilets for boys and girls.

No mention is made of the original gymnasium and the boys' and girls' showers because of the extensive alterations and additions to this portion of the building. The gymnasium floor area was doubled in size, making it one of the largest in the state. A net was placed in the center, dividing the gymnasium into separate sections for the boys and girls. While this room was designed primarily for gymnasium purposes, it also contains a large and completely equipped stage and a dressing room with toilet accommodations. The gymnasium is used for assembly purposes and provides ample seating capacity for the entire school or any community event.

The ground floor of the high school extension is separated from the original building by a passage, and in this section were placed a new print shop, commercial room, typewriting room and a smaller one for advanced mathematics. These rooms are all modernly equipped with the latest style furniture and apparatus for the



Problem

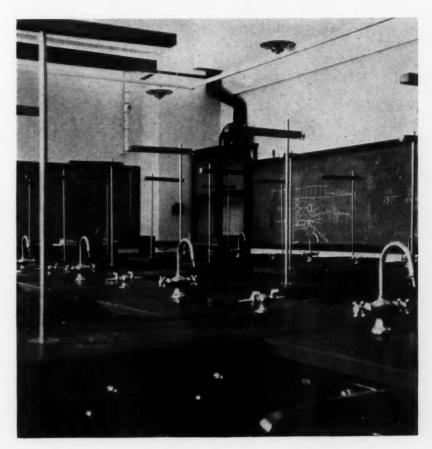
The new addition for senior high, pictured on the opposite page, doubled the school's gymnasium space. Below is the new science room, showing the fume hood with working surface of soapstone.

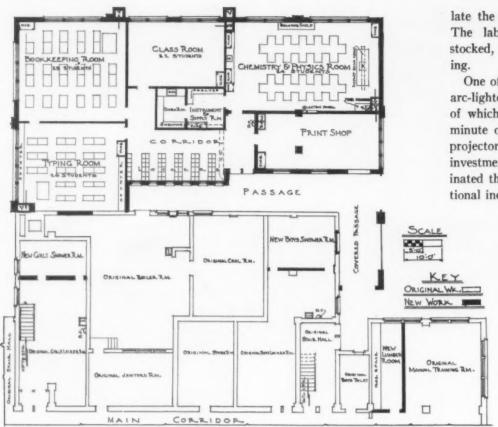
proper and advanced education of the pupils.

Particular interest focuses on the science room in the new addition. Designed for the use of physics, chemistry and biology classes, this room has been the source of considerable satisfaction.

The principal item of equipment is the desks, with separate laboratory chairs. Desk tops are of black acid-proof construction and present a smooth continuous surface, as each sink is equipped with a cover. Compartments are fitted with master key combination locks. Each sink contains a double pantry-cock, connected with hot and cold water and a gas connection.

Red and black electrical receptacles are furnished in the instructor's desk and at various pupil stations connect with a voltage distribution





Above is the plan of the ground floor and, below, the first floor plan.

late the scientific interest of pupils. The laboratory storeroom is well stocked, as is the dark room adjoining.

One of the most useful items is an arc-lighted microprojector by means of which the whole class can study minute organisms at one time. The projector is considered an economic investment because its purchase eliminated the necessity for buying additional individual microscopes.

Architects C. Godfrey Poggi, Elizabeth, N. J., and Alfred M. Korff, Plainfield, N. J., were associated in the Roosevelt Junior and Senior High School project at Dunellen, N. J.

panel in the wall of the laboratory. From this panel AC or DC current is provided for the various outlets. Direct current can be supplied in varying voltages by plugging connections on the face of the panel. The set-up provides for 2-4-6-8-10-12 and 110 volts DC and 110 volts AC. Glass doors with a lock put the panel entirely under the control of the instructor. The face of the panel also shows a voltmeter, ammeter and a 2-amp. charging bulb with suitable switches and a bull's-eye indicator. A six-cell storage battery and a charger are placed directly below the panel. All of this equipment is installed flush with the wall, thus avoiding

A fume hood of ample size with working surface of soapstone is installed in the corner of this room, near the teacher's desk. In the back of the room built-in cabinets with glass doors reveal some of the new equipment. Interesting models and preserved biological specimens stimu-

use of floor space.



Buying to Fit the Budget

By FRED P. REAGLE

NROLLED in the school system of Montclair, N. J., in the year 1934-1935 was a total of 7,762 school children. The budget for the system for the year provided \$42,072 for the purchase of books, supplies and equipment. The town boasts fourteen beautiful school plants.

It has as school employees ten

principals, six directors, ten supervisors, fourteen school secretaries, 286 teachers, forty-four janitors, nine engineers and mechanics, three parttime doctors, one part-time dentist, four nurses, one attendance officer, one part-time lawyer, one accompanist, one superintendent of schools, one assistant superintendent and twelve clerks in the administration building. The supply lists, exclusive of books and equipment, enumerate 3,559 different kinds of items.

The problem, therefore, is how to purchase an annual supply of 3,559 kinds of supplies before the opening of school for 7,762 children, 402 teachers, principals, janitors and other employees by the public advertisement method and at all times to stay within the budgets set up.

During the month of November in each year, the superintendent of schools sends to each principal, supervisor and maintenance department head a form on which is entered the requests to be considered in the preparation of the budget. The headings on this form are as follows:

Personnel (Expansion required) Maintenance

- A. Repairs and replacement of playground equipment, fences, driveways, sidewalks, shrubbery, tree surgery, fertilizer
- B. Repainting of buildings and fences
- C. Repair of buildings; repair and replacement of heat, light and plumbing equipment
- D. Repairs and replacement of telephones, clocks, window shades
- E. Repair and replacement of instructional equipment including wall maps, globes, exchange of typewriters, science equipment
- F. Manual training and household arts repairs and replacements
- G. Other sundry repairs and replacements, such as office equipment
- H. Maintenance department general requests

Capital Outlay

- A. New painting of buildings and fences
- B. New grading and surfacing of playgrounds
- C. Additional fences, new walks and other additions to playgrounds
- D. Building alterations (not repairs)
- E. New educational equipment of all kinds (maps, globes, typewriters, desks, chairs)

Li	sts	No. Items on Lists	Responsible for Revision
A	General School	179	Asst. supt., high school prin., jr. high prin., elem. prin., director primary grades, director upper elementary and jr. high grades
В	Printed Forms	67	Chairman, printed forms committee and committee
C	Medical Inspection	41	Director of health ed. and committee
D	Janitors' and Sanitary	113	Asst. supt., supvr. of bldgs. and grounds, receiving clerk, three school janitors
E	Art for Sr. & Jr. High	248	Director of art and committee
F	Manual Arts - Elem.	295	Director of art and committee
G	Kindergarten	446	Director of primary grades and committee
H	Manual Training	286	Director of industrial arts, two man- ual training teachers
Ι	Sewing	62	Household arts chairman and com- mittee
J	Cooking	97	Household arts chairman and committee
L	Opportunity Classes	141	Opportunity class chairman and committee
M	Physical Education	50	Director of health ed. and committee
N	Special Primary	244	Director of primary grades and committee
Z	Accumulation of items duplicated on foregoing	5	
n :	lists	89	
	nting Department	166	Committee from teachers of printing
	ence Department	320	Committee from science department
	intenance Department	150	Supvr. of bldgs. and grounds and committee of mechanics
Mis	scellaneous Supplies	565	Items not on other lists
	Total	3,559	
	2 0141	0,007	

- F. Equipment for maintenance department
- G. Household arts and manual training additional equipment
- H. Other capital outlay requests

Textbooks

List only extraordinary requests Supplementary Books

List only extraordinary requests Instructional Supplies and Materials List only extraordinary requests

Other Items

These requests are used by the superintendent of schools in the preparation of the budget for the succeeding fiscal year beginning July 1.

On or about the middle of December a letter is written to each committee chairman or head of a department responsible for the original preparation or the revision of a supply list. These supply lists, the number of items on each and the person or committee responsible are enumerated in the box on the preceding page.

This letter notifies the proper committee and person that the lists in which they are concerned should be reconsidered and revised, if it seems wise to do so, and be ready for mimeographing on or about the middle of January.

A number of observations might be made about these lists. It will be noted that instead of having one large comprehensive list nineteen lists are prepared or result from this procedure. This practice is followed because it is easier for the schools to fill out numerous lists than it would be to break down one comprehensive list if such were submitted to the schools. The principal finds it easier to deal with the several departments in his schools with a list already prepared for each department. Sufficient copies of List "A" - General School Supplies — are sent to the school to permit each grade teacher or so-called

regular teacher to submit her request to the principal. The physical education list can be handed directly to that department, the janitors' list to the head custodian, and so on.

There is another advantage in that the same lists are used at a later date — without prices, of course — in soliciting bids from supply houses. It is a fact that one supply company is interested in general school supplies, another in building supplies and another in art supplies.

Another important factor about this procedure is that the persons most intimately concerned with the use of school supplies in the respective departments are the ones who have originally prepared the list and who revise it annually. The same supply lists are used later, as will be seen in the preparation of distribution and compilation books.

Before leaving this brief descrip-

	200	a	36	1	OTAL														BUPPI	IES			TEXT	BOOKS	
	170	1	7 6	3. To	L O	HI	GH	JR.	HIG	B	ELE	CENTA	RY	KINDE	RGART	81	CLAS								
SCHOOL BUILDINGS	0.	H (E 0	1:3	9 2	-	4	-		-	-		-	-	- 3	+-	-	5	OLLMENT	BUDG	PO	FWD	OF	BUDG	150
SCHOOL BOTTDINGS	- FG	-	-	N. W.		Enr.	7	Enr.		-	Enr	1	-	Enr.	*	En	. \$	_	OL O	-	500	-	0.0	-	150 0
HIGH SCHOOL	1528	1		1528	20.	2 1528	100.0				+							1	0.0	1	20.0	10	0.0	- 3	50.0
JUNIOR RIGH SCHOOLS		-	-			-					-				-		\mathbf{H}	-			+	F			-
GEORGE INNESS	509	1 9	D	504	6:	6		504	29	.5								1 2	9.5	1.6	58 5	2	9.5		730.1
HILLSIDE	355	10	D	345	Ц	5		345											0 3		78 9		3		102 4
MT. HEBRON	478	1 2	9	480	6.	4		480		-									5,1	1.7	70 3	2	1	1	502 4
GLENFIELD	366	10		376				376				П			1	-			2.1	1,3	92.30	5	2.1	-	546.9
Sub-total	1706	3	D	1705				1705	100	.0	+	\Box			1		#	10	0.0	6.3	00 0	10	0	2.4	75.0
ELEMENTARY SCHOOLS																					I				
BRADFORD	323	12	2	335	14					-	29	8.	3	40	6.6			+	8.3	6	64 00		3	2	261 4
EDGEMONT	341	0		341	14 .	,				+	29	8.	2	48	7.8	F		1	8.2	6	56.00		2	3	258.30
GEORGE WASHINGTON	515	0		515	6.1	1				1	36	10.	2	99	16.1	52	39.0	1	0.2	8	16.00	10	2	3	321, 30
OLEWIELD	666	0		666	8.8	1				#	499	14.0	0	84	13.6	87	61 0	1	4.0	1,1	20 00	1	0	4	41.00
CROVE	353	1	D	352	4.			-		+	308	8.		50	8.1				5.4	6	72.00		14	2	64 60
HILLSIDE	249	0		249	3.1					#	208	5.	5	41	6.6				5,8	141	64 00	-	. 5	3	82.70
мт. неврои	385	10		395	5.3					+	350	9.8	5	45	7.3				9.8	71	54.00	5	.8	3	08.70
WISHUANE	532	15		547	7.2					+	454	12.7		93	15.1			1	2.7	1,0	16	12	.7	4	00.05
RAID	405	0		405	5.4						347	9.7	1	58	9.4				9.7	7	76.00	5	.7	3	05.55
WATCHUNG	508	10		518	6.9					#	460	12.5	1	58	9.4			1;	2.9	1,0	32,00	12	9	4	06.35
Sub-total	4277	46		4323						+	3571	100.	0	616	100.0	136	100.0	100	0.0	8,00	00.00	100	0	3,2	50.00
ADMINISTRATION BLDG.										+	=		+		+						+				
RAND TOTAL	7513	43		2006	100.0					+			-		+						0.00				75.00

Budget distribution in the school system of Montclair, N. J., for the year 1935-1936.

tion of the lists used, it might be well to say that each list has a letter designation, each item on the list has a number and each item has a definite specification either in the form of a trade or catalogue number of some manufacturer, a word description of the article intended to be purchased or a sample presented by the purchaser and the unit price of the item for the previous year. The heading across the top of List A and the first few items on it are indicated in the box at the top of this page.

The budget of the board of education is adopted according to state law on or before the eighth day of February of each year. This budget contains a total figure under each department of the school system for books and supplies. The amount allowed is based upon a per capita cost study of the town's consumption covering a period of years during

SAMPLE	SUPPLY	LIST	USED	IN	MONTCLAIR	SCHOOL	System
				A-1			
		Ger	neral S	choo	l Supplies		

Item Est. No. Quan.	Unit	Item	Unit Price 1934-35	Est. Inventory July 1, '35
1.	doz.	Blank Books—ruled, 63/4x83/8, 24 leaves (our sample)	.183	
2.	doz.	Blank Books—spelling, 5½x8¼, 24 leaves (our sample)	.168	
3.	doz.	Blank Books—stenography, 6x83/4, 80 leaves (our sample)	.36	
4.	doz.	Blotters—brown—19x24—U. S. 100 lb. stock (our sample)	.24	

which all sorts of conditions have pertained and all extremes in prices have prevailed.

Between the first and fifteenth day of February of each year, the board of school estimate fixes and determines the amount of money to be appropriated for the use of the public schools in each district. After the adoption of this budget by the bodies above mentioned, the next step is to apportion to each school in the relation to the number of pupils all budget items intended for the purchase of books and supplies.

The funds apportioned, the basis

LIBRA	RY	MAGAZ	INES	MEDICAL SUP	PLIES	KINDERG	ARTEN	SPECIAL	CLASS	JA	WITORS' SUPPL	IES
≰ of		4 OF		4 OF		4 OF	1	4 OF			\$ OF	
NROLLMENT	BUDGET	BUROLLMENT	BUDGET	ENROLLMENT	BEDGET	ENROLLMENT	BUDGET	ENROLLMENT	BUDGET SO	PETT	SQ. PERT	BUDGET
100.0		100.0	100.00		63.63		DUME	ERIO LINE II		14 255	16.0	576.0
10020	500.00	100.0	100.00	2012	05.03					14 633	44.5	5704
Special distribution because of other librations	203.00		29,50		20.79			+	++++	57,505	6.0	266
because of	137.00		20 30		14 18		1			77 068	10.8	7 7
facilities	30.00		25,10		20.16			$\overline{}$	Co	mbined w	th Elementar	Y
	130.00	22.1	22,10	5.0	15.75			+		1	• •	$\overline{}$
		100.0	100 00	 				 		-		
	500.00	100.0	100.00									
	0	8.3	8.30	14 14	13.86	6.6	49.50			21 005	3.0	108.
									+	-	$\overline{}$	
	0	8.2	8 20	45	14 17	7.8	58 50	1	++++	20,009	2.8	100.
	0	10.2	10.20	6.8	21 42	16.1	120.75	39.0	214 50	53,280	7.5	270.
	0	10.2	10.20	99	21.42	ABIA I	1	33.0		311201		
	0	14.0	14,00	8.8	27.72	13.6	102 00	61.0	335,50	99 250	13.9	500.
											HH	-
	0	8,4	8,40	4.7	14.61	5.1	60.75		++++	34 745	4.9	176.
	0	5,8	5,80	3.4	10-71	6.6	49.50		Co	mbined w	th Junior	
		3.0	7,00	77	100/1							
	0	9.8	9.50	5.2	16 36	7 3	54.75			80 650	11/3	106
											$\overline{}$	
	0	12.7	12.70	7.2	22, 68	15.1	113,25		++++	71 254	9-9	356.
-	0	9.7	9,70	5.4	17.01	9.4	70.50		1111	31,009	4.3	154
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Budget distribution in the school system of Montclair, N. J., for the year 1935-1936.

for such apportionment and the actual amount of money placed to the credit of each school in each category are fully set forth in the table on the

two preceding pages.

In reading this table, it will be noted that the high school receives all of the money provided in the budget for high schools owing to the fact that there is only one high school.

For a junior high school, the table would read as follows: Under supplies, the Glenfield Junior High School, because it has 22.1 per cent of the pupils in all junior high schools, would have allotted to it 22.1 per cent of the money set up in the budget for junior high school supplies, or \$1,392.30. Edgemont Elementary School, because it enrolls 8.2 per cent of the total population of the elementary schools, has placed to its credit on the sheet 8.2 per cent of the money provided in the budget for elementary books, or \$258.30.

The only deviation from this practice of apportioning money in the relation that the enrollment of each school bears to total enrollment is under the heading of janitors' supplies. In the column "Janitors' Supplies," the sheet would be read as follows:

"George Inness Junior High School, because the square footage in this building is 8 per cent of the total square footage in all schools, receives 8 per cent of the amount appropriated in the budget for janitors' supplies, or \$288."

Early in February following the break down of budget allowances for books and supplies given in the previous table, each principal receives a letter from the administration office notifying him how much money is placed to his credit in each of the following categories:

Textbooks Supplies Magazines Library books Opportunity classes Medical Janitors' supplies

These letters vary slightly with schools as one building houses the high school, one is a junior high school in a building by itself, others are combinations of kindergartens,

elementary and junior high schools, and some are kindergarten and elementary schools only. Some of the buildings have classes for mentally retarded children, so-called opportunity classes, for which a special budget is provided.

This letter is accompanied by the revised supply lists in quantity sufficient to enable the principal to distribute them in his building to those concerned in requisitioning their books and supply needs for the following year. Space does not permit the insertion of one of these complete letters. There is a page of notes and . suggestions to the principal as to what to consider and whom to consult in doing his part of this work.

These letters in the year 1935 were sent out on February 11 and the principal was given until March 22, 1935, to collect in his building the annual requirements for the succeeding year.

It should be kept in mind that the principal has before him up to nineteen different lists, having on them an aggregate of 3,559 kinds of items, each item being priced with the unit price of this item for the previous year. He also has before him the complete and detailed letter telling him how much money is placed to his credit for the purchase of all books and supplies. He is the person who must adjust the needs of his several school departments in terms of the money available. He is the person who must cut where cutting is necessary and rightly so, since he is the person who knows most about the needs in his own building. He has the opportunity to stress one department one year provided it needs additional material with which to work or to hold back on another.

On March 22, 1935, each school sent to the central office a folder containing all of the lists filled out for that school as to quantities needed and the amount of money estimated to be necessary for their purchase, this estimated amount, of course, in terms of the unit price of each item as of the previous year.

The first sheet in this folder for

each school is a summary sheet setting forth the budget allowances to that school under each category and the amount of money estimated to be necessary to purchase the items enumerated in the folder. This summary sheet is set forth as follows:

Budget Accounts	41	1	19	01	a	100	0		F	*	h			1	B	a	1	
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Supplies																		
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List "B"	*							,		*	*			*	*	*		
List "E"																		
List "F"				*													×	
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List "M"																*		
List "N"																		
Printing																		
Novelty																		
General																		
Science																		
Outline				*					,	*	*	•		*		•	*	
Maps																		
Wall Maps					*				*			•		•	•		•	
Orchestra		•	0		٠	•	•			•	*				•	*		•
Music			*			*		*			*		*		*	•		,
Miscella-	*	*		*		*	*	*			*	*	*			*	*	,
laneous																		
Textbooks		*	*	*	*	*	*			*	*	*		*	*	×	*	*
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Library	*	*	*	•	•	•		*	×							*		
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Medical	•	*	*						*							*		*
Janitors'	*	*		*			*		*				٠					
Kindergarten			*						*									,
Opportunity																		
Classes		,				×					ĸ			×	*	×	×	
Equipment School				*														

If the principal's summary sheet shows that his requests are within the appropriation allotted to him, no questions are asked.

These distribution sheets are made, using the mimeographed supply lists such as have been sent to the principals, properly enlarged so as to allow room across the top for the names of all schools and with a column ruled underneath the name for each school. In about a week, a well trained girl transcribes on these sheets all school requirements in terms of the quantities requested. One advantage in this is that it is possible to observe any foolish mistakes. It happens frequently that in two schools, which are comparable in size, one item

seems unwisely large and this affords an opportunity to ask questions. Many foolish mistakes have been found in this way owing more often than otherwise to a misinterpretation of the size of the unit. In the extreme right-hand column of this distribution sheet, the total requirements of all items needed for all schools are listed. In a board meeting nearest to this time, authority is secured from the board of education to advertise for bids for these quantities of supplies.

Advertisements are inserted in local town and county newspapers as required by law. It is reasonable to suppose, of course, that these advertisements do not reach any large number of venders interested in offering bids. This school system has built up over a period of years a long and valuable list of individuals and firms interested in selling supplies to schools. The lists are sent out to these supply houses. The lists sent out are the same mimeographed forms prepared for distribution to the schools but with the unit prices blotted out and the total quantity of each item needed in the town for the succeeding year entered. The venders are given about three weeks in which to prepare and submit their bids. For the year 1935, bids were received on April 23, 1935.

Compilation books to compile all bids received are made up by using the mimeographed forms as sent out to the principals properly enlarged so as to afford space across the top for the name of each bidder. In these books all bids are entered. The lowest responsible bidder for each item is checked by the persons most familiar with school requirements. The total cost of each item is entered in the last column on the right of these sheets.

At its meeting nearest to the date of the completion of these compilation books, the board of education authorizes the purchase of all books and supplies for the succeeding year. For the year 1935-1936 all orders were written subsequent to May 8 and prior to July 15, 1935.

In the actual procedure described,

the principal, on advice of the central office, has been careful to hold back enough of his appropriation to enable him to purchase emergency items needed during the year. These emergency purchases are usually due to increased class size over that expected or to a desire to experiment with new material or to attempt new educational methods.

At the beginning of the school year in September, therefore, each school has to its credit a balance which is subject to the call of the principal on requisition. All requests for material purchased after the beginning of school in September are first sent to the financial office to determine whether the principal has enough money in the account and then to the secretary's office to approve or disapprove the emergency request.

This scheme, which seems fair and equitable, has advantages which might be summarized as follows:

- 1. The educational staff, who know most about the supplies, are responsible for the make-up and annual revision of the supply lists.
- 2. The same amount of money for the purchase of supplies and books is allotted to all children, regardless of race, color or creed.
- 3. The control is a financial one and there is no tendency to place a limit on the number of items on supply lists or any need to compare schools with regard to the number of pencils, pads and other supplies used.
- 4. The prinicipal of the school is the arbiter of his building so far as supplies are concerned and he can therefore emphasize one or another department, depending on the needs.
- 5. Every school and every department must stay within its budget and at any time it is known how much money has been spent by each school in each category and what the balance is for the year.

Business Officials Plan Convention

The president's preview of the convention program of the National Association of Public School Officials, to be held in St. Louis, Oct. 12 to 16, reveals unique features in program buildings and participation.

Members of the association have written their own program so far as topics are concerned, a questionnaire having been sent out recently to the entire membership asking votes on their preferences for both round table and platform discussion.

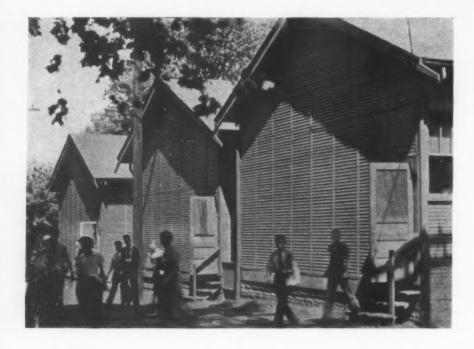
On both Tuesday and Wednesday, Oct. 13 and 14, round table meetings will be held at the luncheon hour. Five round tables will be held each of these days, with assigned speaker for each topic or subtopic before general discussion is begun. Members in the past have declared frankly that too much rambling was done at round tables, and President Paul H. Scholz, business manager, board of education, San Antonio,

Tex., has taken steps to minimize this tendency.

Dr. Isidor Loeb of Washington University, a member of the National Municipal League, will speak on "Business Methods in Public Service." A panel discussion on federal and state aid for financing the public schools will be participated in by men of national importance and some outstanding business managers and superintendents.

Credit unions and the growth of this movement among teachers will be the topic of an address by William C. Bruce, editor of School Board Journal.

The American Institute of Visual Educational Research is expected to send its dean, Dr. J. Keller, to the convention to present a paper on "Efficiency and Economy in Visual Education." The possibility of reducing cost through mass instruction will be stressed.



Old portables are being supplanted in the Indianapolis school system. Above are shown three of the thirty-seven high school classrooms housed in portable buildings. Sufficient funds by direct taxation will be sought to provide modern housing for high schools. Below, the last recitation in the old frame buildings! Children march on to a \$60,000 modern addition to their grade school.

Indianapolis

ACING a serious housing problem in both elementary and high schools, the Indianapolis board of school commissioners is taking steps to catch up with ever-increasing enrollments and to remedy bad housing conditions in the elementary schools.

This movement centers around a modified pay-as-you-go plan under which remodeling and modernization of elementary school buildings will be taken care of chiefly by bond issues



Schools March On!

By A. B. GOOD

Bad housing conditions for Indianapolis school children are being overcome by a well organized modernization program now under way. In consequence, 28 of the 34 stoves are now for sale, 19 classrooms will be available in modern brick buildings by next fall, and the number of children in portables will be reduced to around 900.

and current appropriations, while the commissioners hope to raise funds by direct taxation to build one new high school and additions to four others over a period of a few years.

More than 1,600 children were housed in frame portable buildings at the close of the present school year. Thirty-four classrooms in these portable buildings were heated by stoves. As a result of the modernization program now under way, twenty-eight of the thirty-four stoves are now for sale; nineteen classrooms will be housed in modern buildings of brick construction by the opening of school, and the number of children in portables will be reduced to approximately 900.

A sixteen-room brick building, costing approximately \$202,000, is under

construction and will be ready for use by September 8. This building, Public School No. 87, will replace ten classrooms in five two-room portables joined together. The old school, which had outside toilets and an outside drinking fountain has been torn down. The new School 87 was made possible by a bond isue of \$112,000 and a federal grant of \$90,000.

A six-room addition to School 21 will replace two portables housing four classrooms. An addition of three classrooms and a combined auditorium-gymnasium is being erected to School 44. The present makeshift auditorium is to be remodeled into two classrooms. The cost of these additions will be met by a bond issue of approximately \$120,000. Three other elementary schools that have been housed in portable buildings without modern toilet facilities will be modernized by the installation of steam heating plants and inside toilets.

Other remodeling to be done this summer includes the construction of an auditorium at School 15 by the remodeling of two rooms and part of the corridor; the installation of two new boilers, stokers and direct radiation at School 32, and the installment of a complete steam heating system to replace the present hot air system at School 19.

When Summer Is Over

Modernization projects that will not be undertaken during the summer are the addition of two rooms to School 47, in order to eliminate two rooms now housed in a frame structure, and an addition of two rooms and an auditorium-gymnasium at School 35. This addition will replace two classrooms in a frame building heated by stoves.

The completion of construction now under way will provide modern brick housing for slightly less than half of the children who are now housed in portable frame buildings.

High school housing facilities are severely overtaxed by reason of a tremendous increase in high school enrollment in the past decade. Since 1928 only twelve permanent classrooms have been added to the high schools, while the enrollment in the same period has increased by more than 5,000 pupils. Thirty-seven high school classrooms are in frame buildings which were considered temporary when erected. The high school enrollment is now approximately 18,000, which is distributed among six schools.

High Schools Are Overflowing

How the buildings are crowded to overflowing is shown by the following table of building capacities vs. present enrollment.

		Enroll-
School	Capacity	ment
Washington	1,000	2,200
Crispus Attucks	1,400	2,300
Shortridge	2,500	3,600
Arsenal Technical	4,000	6,700

Because of a drop of \$186,000,000 in the valuation of the city's real estate since 1930, the school city's power to issue bonds has been reduced \$3,736,000. On Jan. 1, 1936, its bonded indebtedness was within \$70,000 of its legal bonding limit.

However, the school city, through annual contributions to the sinking fund, has been able to reduce its bonded indebtedness more than \$2,-000,000 in the last seven years. The bonds of the school city have been rated by the New York state banking department as among the ranking desirable securities of the country. Less money is owed than for many years, but the fiscal policy of previous boards in issuing term bonds and the reduction in assessed valuation of real estate have combined to place the present board of school commissioners in a position in which it cannot issue any considerable amount of bonds.

Better Plant Practices · · ·

Repair Work Separated From Janitorial Duties

A repair crew and a janitorial staff are maintained by the board of school inspectors of Peoria, Ill., each with individual duties to perform that in no way conflict with one another.

"The janitors clean and care for the buildings preparatory to the opening of school in the fall," explains G. T. Mowat, secretary, "whereas the repair crew proceeds with such repairs as may be made by them, both to buildings and equipment.

"The annual survey is completed, usually, during the month of May so that preparations may be made for proceeding with the repairs as soon after the close of school as is practicable. Major repairs are usually handled by contract, local contractors almost invariably being used. In the case of additions or alterations of buildings involving large expenditures, bids are taken from without the city as well as from local contractors.

"The extent to which buildings are overhauled is dependent almost entirely upon the conditions found and the budget. The real problem, of course, is to provide the funds necessary to make all of the repairs that are needed."

Special Fund Desirable to Cover Insurance Risks

Insurance on public school buildings, always an important subject, has been carefully studied over a long period by H. L. Mills, business manager, Houston Independent School District, Houston, Tex. "Our board of education," he explains, "determined that it would be a good policy to begin to set aside some kind of an insurance fund, and by a resolution passed eight years ago there was to be \$10,000 each year set aside into what is known as the 'Fire Insurance Sinking Fund.' This fund at the present time has in it \$84,368.52, this representing the \$10,000 placed therein for each of the eight years plus accrued interest earned on the money.

"Last year the board of education of the Houston Independent School District spent a total of \$24,065 for insurance, including the \$10,000 placed in the insurance fund.

"As a comparison, in 1922 the board spent \$36,000 for insurance premiums alone and placed nothing in a fire insurance fund. The board was forced to carry 80 per cent of the cost of the building at the time it was constructed. This resulted in a campaign to leave the question of the amount of insurance to be carried on any particular building to the discretion of the board of education. In other words, it was in our opinion foolish to spend \$500,000 for a school building, making it just as near fireproof as could be done, and then be required to carry \$400,000 insurance on said building. At present, the district has 118 school buildings, while in 1922 it had only seventy school buildings.

"We have eliminated such forms of insurance as tornado, boiler and burglar insurance, because in our opinion their cost is not justifiable. We have some burglaries, of course, but when we add up the losses at the end of the year we find that we would not be justified in carrying insurance. Occasionally we have damage from wind storms but again when we add the cost of the damages for the one-year period or the five or the ten-year period, we can easily see that the cost of premiums for tornado or wind storm insurance would not be justified.

"The truth is if we take a five-year, ten-year or twenty-year period even for fire insurance and compare the amount collected from fires with the amount of premium that has been paid for fire insurance, it seems doubtful that there can be any justification for having paid so much money for premiums on fire insurance policies; yet it is necessary, of course, that public school buildings be properly protected from fire damage.

"I believe that the time is not far distant when every school district will begin to set aside a special fund to cover fire insurance risks or that the various states will take action to provide state insurance on school buildings."

Beware the Cricket on the Hearth

"Probably the most common cricket over the whole of the continent is the black field cricket, *Gryllus assimilis*," according to J. N. Laferriere, entomologist. It is a variable species with many subspecies, varieties and races, which have even received specific names.

"The cricket is a widely distributed field and house pest in North Dakota, and in 1915 it was so abundant in many parts of Kansas that it entered into houses and stores, and destroyed cloth-

ing, curtains and rubber goods. Munro and Carruth (1932) have recently conducted a series of experiments against the black field cricket. Molasses was found to be the best attractant, and sodium fluoride and sodium fluosilicate proved to be more toxic than either white arsenic or Paris green or thallium sulphate. The bait is composed of bran, 5 pounds; sodium fluosilicate or sodium fluoride, 4 ounces; cane molasses, 0.5 gallon, and water, 0.6 gallon. Pyrethrum powder is more toxic than sodium fluoride when the latter is used as a powder, probably because the cricket has not the same cleaning-up habit as the roach."

Effects Savings in Fire Insurance

A method by which the board of education, San Antonio, Tex., has saved considerable in fire insurance costs is revealed by Paul H. Scholz, business manager.

"For about five years we have carried our own insurance except on frame construction, which is covered by about 80 per cent of value. No insurance is carried on buildings and equipment of fireproof and semifireproof construction. We set up on our books a reserve from surplus annually to cover possible losses on uninsured property. On frame construction we carry commercial insurance and distribute the risk over a large number of local insurance companies in about equal amounts. By our plan we have saved considerable money over the old practice of insuring all buildings. We decided on the present plan because experience showed that we had only two fire losses in about twenty years, neither of which exceeded \$10,000 damage, and in the same period premium costs were about \$50,000."

AN INVITATION

Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.



Stage setting for annual Armistice Day program, designed and directed by the band director. The electric flag in the center is made of wood, with 245 red, white and blue 7-watt bulbs with standard base.

The Custodian Takes the Stage

N THESE modern times, the custodian who would make himself a really valuable man, who would greatly increase the demand for his services, must extend his efforts far beyond those necessary only for the efficient performance of his regular janitorial duties. One of the many ways in which he can do this is to maintain strict cooperation with the school officials in the arrangement and production of school activities.

The weekly chapel or assembly program has become a permanent phase of high school operation. The quality of these programs should therefore be the best obtainable. Many times these programs require

stage settings approaching regular theatrical productions. It is, of course, the duty of members of the faculty to arrange and direct these programs, but the average school teacher, although he knows exactly what scenery or stage setting is needed, has little or no knowledge of things mechanical and is at a loss to know how to produce them. Who, then, can be called upon for assistance but the custodian?

No two programs will use the same stage setting. The custodian must therefore be both original and resourceful, because the stock of stage scenery in most high schools is limited. Perhaps the setting needed for some particular program cannot inBy W. F. CURRINGTON

Suggestion for the custodian who would make his services more valuable next term! Why not be prepared to participate in school activities by acting as stage designer? Mr. Currington offers many interesting, workable ideas. clude any of the regular scenery. This is really an emergency and makes it necessary to design a suitable setting from the many odds and ends of the regular school and stage properties.

The resourceful custodian will make a sketch or diagram, furnish the material and from that point the director of the program, with the assistance of the cast, can go on and make up the setting. The cost must be kept down to an extreme minimum, because the funds available for such theatrical productions are limited.

A Crazy Set

One of the weekly programs in a high school, for example, was to be of the "crazy" type. In fact, the title of the skit was "Everything Crazy." It gave promise of being a highly successful comedy production. The stage setting, of course, had to be strictly in keeping with the program, and the director was bewailing the seeming impossibility of producing a suitable one. But the custodian quickly solved the problem.

The stage scenery in this school consists of one exterior set-a woodland scene-and one interior set, either side of which can be used. A combination of both sets was made up, intermingling the exterior wings with the interior panels and flats, placing some of them upside down and others inside out. An interior panel with a fireplace and mantelpiece, which would naturally have a picture of some kind above the mantelpiece, was placed upside down, with a picture, also upside down, hanging underneath the mantelpiece. A large interior panel with a pair of French doors was placed on its side, the back drop of the exterior set filling in the gap above and masking the backstage.

This particular set, at no extra cost whatsoever, made a hit with the audience. It gave the "crazy" idea immediately upon the initial opening of the curtain, and the program was pronounced one of the best ever put on in that school. This, however, is only one of the many ways in which the original, resourceful custodian can

place a high value on his services.

In addition to the weekly programs there are the two more elaborate productions—the junior play and the senior play. These two plays usually consist of three acts, all using the same stage setting, but occasionally there will be required a change of scenery between two of the acts. This change must be made in the shortest time possible.

In one senior play the first act required an exterior set and the second and third acts an interior set. This worried the director. She was afraid too much time would be required for the change and arranged two rather lengthy numbers out front. This proved an unnecessary precaution, because by actual timing, the change was made in exactly six minutes.

The exterior set was put up and made ready for the first act. Then the interior was placed around it in three sections, all the panels in each section lashed and braced, and the pictures, drapes and other trimmings put in place. To make the change, the exterior back drop was rolled up, the borders hoisted clear and the six wings carried away. The back wall of the interior and the two end sections, with their braces, were moved into place by sliding along the floor, the three sections lashed at the corners and the borders lowered.

For Bracing Scenery

Usually the interior scenery used in high schools is of the type that requires bracing of some kind in order to keep it in place and in an upright position. Since in many schools the stage floor is also the gymnasium floor, which does not permit the use of nails, screws, bolts or other materials for fastening anything to the floor, an excellent and inexpensive set of scenery bracing can be made as follows:

From any lumber mill get ten or twelve wooden blocks, 12 inches square and 6 inches thick. These are sufficiently heavy to withstand the strain necessary to hold the scenery in place, and can still be moved over

the floor by sliding, without doing any damage to the floor. Get ten or twelve 1 by 2-inch poplar strips, 8 feet long. Poplar is used because it does not split as easily as other woods. Screw into each end of these wooden strips a No. 10 screw hook. Screw into the center of one edge of each of the heavy wooden blocks a No. 10 screw eye. Into the inner edge of one of the side members of each piece or panel of the scenery, 6 feet above its lower end, screw a No. 10 screw eye. To brace the scenery, hook one end of the poplar strip to the screw eye in the scenery. The position of the wooden strip will be outward and downward from the scenery to the block, at an angle of about 30 degrees.

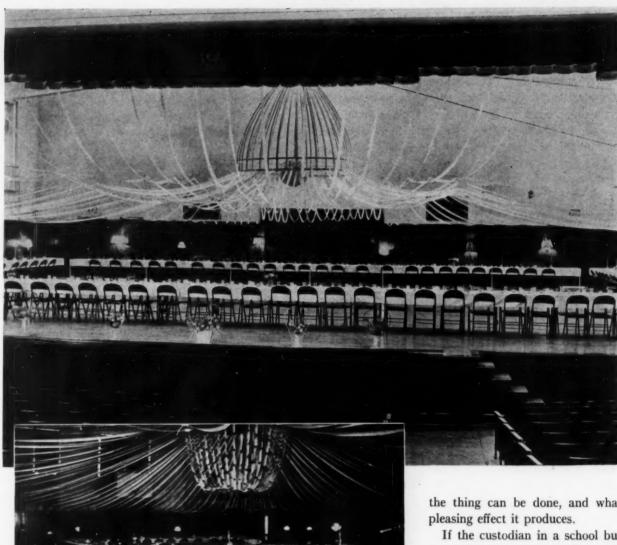
With this equipment the scenery can be easily, quickly and securely braced, and when quick changes are necessary the whole assembly can be moved by sliding along the floor.

Decorations for Banquet or Dance

Assorted lengths of 1-inch gas pipe, a quantity of 3/8-inch hemp rope and some single pulley blocks should be included in the permanent stage properties to facilitate handling imported scenery, which is occasionally needed for special stage productions.

Custodians in schools that are equipped for dancing and banquet service are fortunate in having greater opportunity to make their services more valuable. Schools thus equipped usually have a combination gymnasium, stage, banquet and dance floor, the area of which may vary from 2,000 square feet to 6,000 or 8,000 square feet. As a rule the ceiling of a room of this kind, owing to the heavy trusses necessary to support such a vast area, has a barnlike appearance. This can be eliminated by use of a false ceiling, which is particularly appropriate for principal social events such as the junior-senior banquet.

To the inexperienced the problem of erecting a false ceiling over a floor space of 6,000 or 8,000 square feet may appear staggering, but it is surprising how easily and inexpensively



Decoration for junior-senior reception, designed and directed by a faculty adviser. The 30-inch ball in the center was made by rolling eight pieces of 1/8 by 1-inch band iron into semicircles and riveting their ends, evenly spaced, to two circular pieces of 1/8inch steel plate, with a 3/8-inch steel rod threaded at both ends passing through the center of the plates. Nuts were used inside and outside of each plate, and an "eye" was bent in the upper end of the rod for attachment to the 3/8-inch rope by which the ball is supported. The frame was covered with screen wire, the wire being covered with fiber plaster imbedded in which were pieces of broken mirror. Colored lights traveling over ceiling, dance floor and walls made a pleasing effect. The dome, which is 10 feet in diameter at the bottom, 2 feet at the top and 8 feet deep, is made entirely of lattice strips, bolted to the two rings at the bottom and fastened with wood screws to the 2-inch circular top. This top piece of wood is beveled 45 degrees at its outer edge to accommodate the curve of the upright strips.

the thing can be done, and what a

If the custodian in a school building equipped to produce all the activities within its own walls has a reputation for possessing ingenuity, the class adviser of the junior-senior banquet will go to him for suggestions or ideas relative to designing and erecting the decorations.

One might think that a false ceiling for every junior-senior banquet, year in and year out, would in time wear itself out. This is not true. because the number of different designs that can be used is practically unlimited. In fact, five or six designs should be considered for each decoration. As soon as one has been decided upon the janitor should either do the work himself or supervise the erection of the framework, which is really the design itself. The best material to use for this is stove pipe wire, of about 18 gauge. It is light in weight, flexible, easy to handle but very strong. This wire is suspended from wall to wall, at a suitable distance above the floor and in a manner to carry out the design of the false ceiling. Naturally the erection of this wire framework is really the backbone of the job. From that point it is a simple matter to cut the crêpe paper of chosen color into 2-inch strips, and with common pins, attach the paper to the wire frame work. The class adviser supervises this work, which is done by pupils.

In building a false ceiling of this type, two or three hours for the janitor and one assistant is usually required to erect the framework and two or three evenings after school for the class adviser and assistants to put on the paper. The total length of wire and crêpe paper covering an area of 5,000 square feet is approximately two miles. The wire will cost from \$1.50 to \$2. Crêpe paper comes in bolts 20 inches wide and 10 feet long. Cut in 2-inch strips, one bolt will make 100 feet. One hundred bolts is usually required for a ceiling of 5,000 square feet.

From eighteen to twenty floor lamps are usually placed around the walls in a decoration of this kind, which with the regular stage equipment of colored footlights and border lights, produce the proper soft light for dancing. To provide electrical apparatus for stage plays, the custodian will include in his regular stage properties a quantity of extension cords in assorted lengths, with light sockets attached.

Decorations for baccalaureate and commencement exercises can easily be the same every year. Nothing produces a more pleasing effect than potted ferns and seasonable flowers. used in conjunction with colored footlights. In a footlight span of from 25 to 30 feet, seven pots of ferns and six baskets of flowers should be used. Place a fern in the exact middle of the span and space the others evenly to each end of the span of lights. Then, starting on each side of the middle fern, place the baskets of flowers midway between the ferns, out to the end. Green and red footlight bulbs of 50 or 60 watts should be

used. In front of each pot of ferns put two green bulbs and in front of each basket of flowers two red bulbs, taking care to place the flowers and ferns sufficiently far backstage for the light glow to reach their tops. The audience, of course, cannot see the lights; they can only see their reflection on the flowers.

Everyone who has used this kind of decoration and lighting effect will readily attest to its beauty. The stage setting should, of course, be an exterior, either a wood or a garden scene. No white or clear bulbs should be used. The house lights should be off, and only enough stage lights used to furnish the necessary illumination for the program. All colored bulbs in any lighting effect should be what is known as "natural." The color

should be in the glass instead of painted on. The flowers used in the baskets can be gathered by the school pupils.

From these ideas and suggestions it might seem that an impossible amount of work has been imposed upon the school custodian. This is not true, as little of the actual work described should be done by the custodian himself, but he should be able and willing to create ideas and supervise the work of putting them into effect. Teachers and pupils engaged in erecting stage settings and decorations frequently give little or no thought to possible damage to the building. A single nail in the wrong place may do considerable damage. It is the custodian's duty to see that such things do not happen.

Planning the School Planting

EVERY section of the country presents its individual landscaping problem. In school work particularly it is essential to incorporate in the working plan trees and shrubs indigenous to the locality which may reasonably be expected to thrive despite the scant attention they receive.

For the benefit of those contemplating planting school grounds in the Carolinas, for example, Loutrell W. Briggs of Briggs and Stelling, landscape architects, New York City, offers the following sugestions:

Evergreens

Large trees: Magnolia grandiflora, Quercus virginiana (live oak), Quercus darlington, Cedrus deodara, Cedrus libani (cedar of Lebanon) and Libocedrus decurrens (incense cedar).

Small trees: Juniperus communis (common juniper), Thuja orientalis pyramidalis, Juniperus virginiana (native cedar), Eriobotrya japonica (loquat), Ilex opaca (holly), Laurocerasus caroliniana and Ligustrum japonicum.

Shrubs: Abelia grandiflora, Aspi-

distra lurida, Azaleas, Cotoneaster pannosa, Cotoneaster horizontalis, Gordonia lasianthus, Ilex cassine, Ilex crenata, Ilex vomitoria, Ligustrum lucidum, Nandina domestica, Nerium (oleander), Pittosporum tobira, Pyracantha in variety and Thea sinensis (tea plant).

Deciduous

Large trees: Acer rubrum, Populus nigra italica (Lombardy poplar), Quercus alba (white oak), Quercus rubra (red oak), Quercus palustris, Ulmus americana (elm) and Celtis mississippiensis.

Small trees: Cornus florida (dogwood), Cercis canadensis, Albizzia julibrissin (mimosa), Magnolia soulangeana, Melia azedarach umbraculiformis, Lagerstræmia indica.

Shrubs: Berberis thunbergii (barberry), Cydonia japonica, Chionanthus virginica, Deutzia in variety, Forsythia in variety, Jasminum in variety (semi-evergreen), Spiræa vanhouttei, Spiræa thunbergi, Stephanandra flexuosa, Symphoricarpos in variety and Weigela in variety.

Population Trends Bring Building Problem

By G. E. IRONS

N ANY growing city, the well-trained school administrator presumably has been educated to the necessity of anticipating future growth of population in planning school building programs. In larger cities, specialists are employed to see to it that proper allowance is made for such expansion, so that school sites may be properly located and buildings constructed adequate in size for at least a few years ahead.

Is Life Too Long?

Recent investigations into the population trends of Cleveland lead to serious questions in regard to the length of life for which a school building should be designed, in whole or in part.

The accompanying chart prepared by Howard Whipple Green, statistician for the Cleveland Health Council and one of the U. S. census supervisors in 1930, is the result of tracing the population history of each annexed area of the city of Cleveland as a separate district. The letters A, B, C, etc., refer to the different areas annexed, and the time when these areas first appeared in the Cleveland records (*i.e.* the next census date after annexation) is the first date appearing on the time line of each chart.

The detailed figures of population cannot be read from these charts reduced to small size, but this is not important. All one needs to do is to observe the general shape of the population graphs, particularly in the cases of the older areas, A to E inclusive, and also H. It will be noted immediately that these areas grew from negligible beginnings to their full development during a period averaging about seventy years in time,

in most of the areas. Then they began to decline in population, and up to the present time they have declined steadily in each case, without any interruptions large enough to be visible on these compressed graphs.

Please note also that the oldest, Area A, has practically completed its life cycle in one hundred yearsforty years upward and sixty years downward. Area B, at its indicated rate of decline, may duplicate the record of Area A and fade out of sight as a contributor of population within one or two decades. In other words, its life history seems likely to have a completed cycle also approximating one hundred years in length, seventy years upward and thirty to forty years downward. In Areas C, D, E, F and H the declines have begun and are pointing toward somewhat similar results, but they have not progressed far enough to permit dogmatic predictions.

Better and Better Buildings

The problems confronting us appear to be these: (a) would the population records of other cities show similar tendencies if analyzed by individual districts, and (b) if such tendencies should be found to be more or less characteristic and common to all, what effect would this finding have upon the planning of school buildings?

On the one hand, there has been a strong tendency to build better and better school buildings, making them so enduring that they have been aptly called "forts to last one hundred years." On the other hand, the evidence of these population trends, and not a little actual experience to boot,

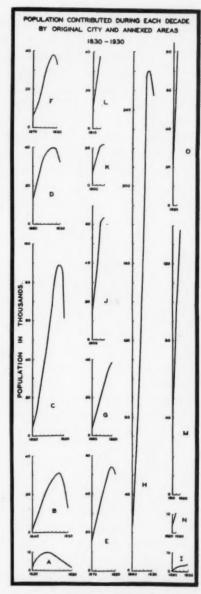


Chart by Howard W. Green, reprinted from Engineering News-Record, Feb. 9, 1933, by courtesy of McGraw-Hill Publishing Co.

raises a question as to whether these "forts" will have any children in them after one hundred years have passed.

Already, in Cleveland, we find

large schools enlarged by one addition after another at various times, in order to keep up with growth of enrollment, now becoming gradually depopulated.

In several sections of the city, schools crowded to the roofs and with classes on half-time only ten years ago now have an increasing number of empty rooms each year. Never during its history has Cleveland ceased to grow in total population at each census period. But, obviously, its residential population has shrunk away in the center while increasing on the periphery. Have other cities shown the same tendencies?

In Boston and St. Louis, at least, similar trends have been discovered by Mr. Green.* If other cities of the country are found to show the same characteristics, it will be well to give some thought to building policies for the down-grade as well as for the

e"City Growth and Decay Revealed by Census Figures" published in the "Engineering News-Record," Feb. 9, 1933.

up-grade. Such questions as these would suggest themselves:

- 1. Should Grade A permanent school construction be provided for all children as a new district develops, only to find a gradually increasing amount of building space standing idle when and if decline begins?
- 2. Should part of the expansion in any urban school building be of a semipermanent nature only, and capable of break-down and relocation somewhere else (something like the prefabricated houses)? This might involve a central core of permanent construction, containing all the main units of the building and part of the classrooms, with additional classrooms attached as wings of semipermanent construction.
- 3. Should we continue to provide permanent rooms within the main building for all pupils, but build the entire structure more cheaply, which involves higher maintenance costs throughout the life of the building?

Start at Bottom of Stairway

M swept with a treated sweeping mop. However, there are many stairs in use whose construction necessitates the use of a floor brush. Stairs having square corners or that have rough or grooved treads are more difficult to sweep with either a mop or a floor brush. A floor brush is the best tool to use on stairs of this description.

In sweeping stairs having a wall on each side, one should begin at the bottom of the stairway and sweep the dirt to one side, working toward the top. When the top of the stairway is reached, the dirt can be swept down from the opposite side working from the center of the tread toward the outside, using a slight brushing motion in the corners. This procedure is carried on to the point of beginning where the accumulation of dirt can be picked up in the usual manner and disposed of. The method can also be used to good advantage on stairs having a grille on one side and a wall on the other.

The sweeper may stand on the tread above or two treads below the one that is being swept, depending on which is more convenient.

This method of sweeping will allow traffic to use one side of the stairway while the other side is being swept. The use of a sweeping compound is not recommended except in instances in which the condition of the stair or the quantity of dust makes the use of a mop impractical, and it becomes necessary to make use of a floor brush.

When sweeping stairways with a rail on both sides, it will be necessary to sweep from each side toward the center of the stair. This will keep the dirt away from the edge of the stair and will prevent it from falling to the floor below.

Stairs having a traffic rail in the center sometimes offer an additional inconvenience for sweeping but can usually be swept by the same method as prescribed. — *Model Custodian*, February, 1936.

With a Good Finish the Wall Wins

Modern walls are subject to a wide variety of treatment. When fitting that they should assume the warmth and richness of wood paneling, they may do so without benefit of that material at all or without the burden of its cost.

A paneling has been created comprising a mastic treatment over standard and approved fire-resistant and fireproof building boards-4 feet wide, from 6 to 12 feet long and from 3 to ½ inch thick. This surface treatment becomes a part of the board itself, finished in colonial knotty pine or in mellow-toned oak of the early American and English periods. Moldings of actual wood may be applied to these surfaces, or if greater detail is required to carry out the decorative effect, panels of linen fold design or wide decorative moldings processed in the same manner.

The paneling is easily fitted to any painted or plastered surface—com-

plete dry-out is unnecessary—or it can be erected directly over studs in new construction. The rigidity of the sheet makes unnecessary a smooth ground surface. It is merely nailed on as is wood paneling, and the sheets are light so that one man can easily handle them.

Another interesting feature is that it comes in proper thicknesses so that it can be applied to a wall without disturbing the existing trim. Regardless of the thickness, the surface is always the same so that in remodeling work two or three different thicknesses can be used to accommodate existing conditions. When the design of the room demands that the wood treatment be carried to the ceiling in the form of beams, the same composition paneling is possible. Pillars can also be completely disguised in the same way. The upkeep is the same as wood; occasional waxing will maintain the finish indefinitely.



Lunch in a One-Teacher School

ARDWICK TOWNSHIP, in which Franklin Grove School is situated, is in a remote and very hilly section of Warren County, New Jersey. Many of the children are of foreign parentage. Most of the homes lack those things that make living attractive and pleasant.

All of the children carried cold lunches throughout the school year. These lunches were unattractive and often inadequate as to quantity as were the meals served in many homes.

The need for some means of improving the eating habits, of providing more food in many cases, and of establishing standards for the preparation, handling and serving of food led those interested in Franklin Grove School to choose the daily hot dish prepared and served by the pupils as an activity for this school.

By BLANCHE E. MORAN

A small fund, which had been set aside for this purpose by the county superintendent of schools, was available for purchasing minimum equipment. Anne Hoppock, Warren County helping teacher in charge of this school, secured the cooperation of the local school board in furthering this project and called a committee meeting with the teacher, president of the local board of education and the county home demonstration agent. At this meeting the whole plan was discussed and a list of equipment necessary to carry on was made up.

Funds were found to be sufficient to buy equipment but not to buy food. Because it seemed inadvisable to secure anything except uncooked food from local parents and because little of that would be available, the next problem was to secure some financial assistance from groups in near-by Blairstown.

The county home demonstration agent and the helping teacher first called on the president of the local Red Cross, who was the retired headmaster of a boys' private school in the same town. He volunteered to ask that his contribution to the local Red Cross fund be used for the school lunch and advised an approach to the headmaster of Blair Academy. This official was equally interested, pledged a first contribution and promised to

interest the boys in his school to take this up as their special interest. The boys responded readily and, through "dessert-less" meals and other devices, raised a fund each month for this project. Later, the local chamber of commerce contributed.

Mildred B. Murphey, state home demonstration leader, and Marie C. Doermann, nutrition specialist, both of the home economics extension service of the New Jersey College of Agriculture, also cooperated with the home demonstration agent in planning and carrying out many of the details.

The equipment to serve approximately 35 children consisted of the following items:

Oil stove, two-burner\$	13.00
Oilcloth, 6 yds	1.50
Linen for dish towels, 9 yds	1.89
Dish cloths, 6	.54
Long-handled spoon	.25
Paring knives, 6	.60
Pitchers, 2	1.96
2,500 napkins	2.16
Large dish pans for rinsing, 2	3.96
Long-handled ladle	.39
Two vegetable brushes	.26
Quart cup	.49
Wall can opener	.75
Small saucepan	.10
Box for knives and spoons	.10
Soap, scouring powder	1.00
Measuring cup	.49
12-quart double boiler	6.50
Cups, 25	3.50
Spoons, 35	3.15
Garbage can, 5½ gals	1.00
Oil can, 5 gals	1.19
Oil can, 1 quart	.25
Screws for hanging cups	.10
Trays for serving	2.20

This proved to be adequate with a few minor additions such as a small saucepan and some additional containers for left-overs.

The oilcloth mats are a sunny yellow and the napkins a harmonizing shade of green. The extra expense involved seemed justified by the added attractiveness. The cups used are large enough for a good serving of soup or chowder as well as for beverages. They are dark gray granite ware as are the double boilers. Pitchers, which are used in serving all liquids, and the large dish pans are of heavy aluminum. The spoons,

attractive in design, are silver plate over a nickel base and they have worn well for two years.

The kitchen was fitted up in half of a long, narrow cloakroom which extended across the entire front of the building. This cloakroom is approximately 22 by 8 feet and has three windows and a door. One window is in the end farthest from the kitchen and the others are on either side of the door which divides the length of the room. A cupboard was already available in the end of the cloakroom used for the kitchen, and a table was built against the wall which could be hooked up out of the way when not in use. A narrow shelf, which is used to place trays on and to hold extra pans when the food is being prepared, extends along the opposite side of the wall.

Hand Washing Facilities Provided

In the other half of the cloakroom, the children's wraps are hung, and on a shelf corresponding to the one in the kitchen end of the room, lunch boxes and pails are stored. In the corner near the window a lavatory with an outlet was placed where the children can wash their hands. While no running water is available, the ease with which wash water can be disposed of helps materially in establishing good habits. Older girls attend to heating water for hand washing and supervise the younger ones in the group. Great care is taken with ventilation. Even on the coldest days, the cooks are careful to keep windows lowered a little at the top while cooking is going on.

From the start, the children, under the leadership of Margaret Collins, their teacher, have been led to feel an active interest in the whole undertaking. Menus were prepared and duties relative to the preparation and serving of the food were worked out. As a part of the work of the girls in the 4-H Club, dish towels were hemmed and desk mats made. The boys cooperated fully by painting, putting up hooks, making some orange crate furniture, and later even became cooks and servers.

The dishes served at the lunch period, because of many limiting factors, are necessarily less varied than would ordinarily be desirable. Dishes served during a week run about as follows: Monday, cocoa; Tuesday, spaghetti and tomatoes; Wednesday, rice and milk; Thursday, steamed cabbage, and Friday, corn chowder.

Other dishes served at various times are: thickened stewed tomatoes, rice pudding, stewed fruits, creamed potatoes, creamed carrots, tomato soup, rice and salmon, Indian pudding, vegetable soup and oatmeal.

The cost of servings, which are always generous, is approximately .021 cents each. This figure was arrived at through accounts kept by the teacher and girls who assisted in the buying. It does not take into account limited gifts of food from parents.

Objectives include better nutrition, good eating habits, socially acceptable table manners, the planning and carrying out of various undertakings relative to the project, making good social contacts with visitors to the school, and the care and handling of equipment.

Children Work Out Objectives

The following objectives worked out by the children themselves have been printed on a large poster which is always kept in sight. They are discussed and checked at various times.

- To prepare, serve and enjoy the daily hot dish in the best possible way.
- To supplement materials with which to work.
 - 3. To entertain parents and friends.
- 4. To help the adults plan and carry on a box social to raise money for food.
- 5. To set up an institution in the school that "will live after us."
- 6. To send a weekly bulletin to the Blair Academy boys, Miss Moran and Miss Hoppock, who help us.
- 7. To prepare an exhibit of our activities for County Achievement Day.
- To form garden and canning clubs for summer preparation of hot lunch materials.

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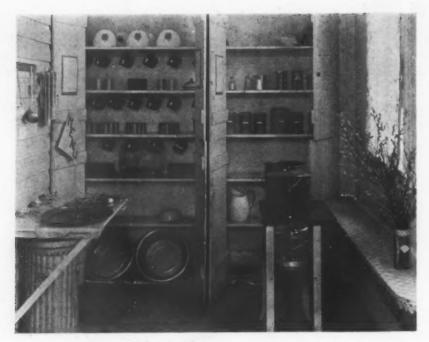
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ADDRESS.

CITY.....STATE....



One end of a narrow cloakroom serves as a kitchen.

Another chart with the heading "How We Work" was prepared by the children. This is worded as follows:

- Plan menus a week ahead in order to know what we shall need to buy or bring.
- Clean vegetables or make other preparations before school or at morning recess.
- 3. Put water for washing hands on to heat at 10:30.
- Start to cook as soon as necessary (cooks do arithmetic lessons at home so as not to get behind in their work).
 - 5. Set trays at 11:55.
- Start pupils to washing hands about 11:50.
- 7. Set the tables, put out mats, napkins, spoons and water cups.
- Spread out lunches, say grace and serve food.

Another chart, "We Are Careful," as made by the children, follows:

- 1. To keep our kitchen tidy, arrange overshoes and coats neatly and as far as possible from the cook stove and straighten lunch boxes.
 - 2. Plan good menus.
 - 3. Wash hands before eating.
 - 4. Have recipes posted.
- Have hot water ready for cooking and washing.

- 6. Have clean hands and nails and tidy hair when cooking or serving.
- Keep the windows open in the kitchen when cooking.
- 8. Wear aprons when cooking or serving.
 - 9. Wash aprons weekly.
- 10. Wash towels daily and scrub them weekly.
- 11. Avoid tasting from a cooking spoon.
- 12. Rinse dishes with very hot water.
 - 13. Use our own cups only.
- 14. Sweep and dust "kitchen" and "dining room" after lunch.
 - 15. Dispose of garbage carefully.
- 16. Spread out lunch and put lunch boxes out of the way.
 - 17. Wait for grace before eating.
- 18. Leave spoons on the table and not in the cups.
 - 19. Use napkins.
 - 20. Have a cup of water for lunch.
- 21. Take visitors' wraps, seat them, serve them first, and help them feel at home.

All of the children were deeply interested in knowing how a table should be set, food served and the correct etiquette for various occasions. The saying or singing of grace was discovered in a 4-H Club book and seemed to make an especial appeal. It was adopted with great enthusiasm.

Courtesy at table is taught and practiced when the different pupils take turn at sitting at the party table, which seats four. Every child, even to one of the smallest whose duty is to keep the overshoes fastened securely together with clothes pins and in a neat row on the floor, has some part in carrying out the objectives set up. Critical judgment is developed through securing suggestions from visitors who come and from those working closely with them, and then at stated times going over these suggestions. After discussions, new ideas are tried out and adopted or abandoned as seem wise. Even the smallest pupils are asked for suggestions and their contributions are given consideration.

Community participation in making this undertaking a success was secured as time went on, and the pride taken by the parents who gradually became interested enough to visit the lunch period was most gratifying. There is undoubtedly a carry-over into the home of some of the practices learned by the girls. There were splendid responses from local people when a box social was put on as a means of raising additional funds and when a second social was planned to send several girls to the North Jersey 4-H Club camp.

During the late spring and early summer, a 4-H garden club was organized and products from these gardens and donations from interested parents supplied the girls with vegetables which they canned with the assistance of the home demonstration agent for use next winter.

All those interested in the welfare of the children in this school are agreed that in this unit a wide variety of skills are developed in selecting, buying, preparing, serving and eating good food, in establishing good housekeeping habits, and in acquiring greater self-control, dependability, initiative and resourcefulness. The ability to meet people in a poised and friendly way is also developed, and a feeling of accomplishment is gained.



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Ceiling Holds Its High Position

AILURE of ceilings in two New York City schools to stay in their proper place prompted an investigation of the schools in all five boroughs. As usual in modern construction, an air-tight space or chamber is provided between the ceiling and the floor above. In this are concealed water and heating pipes, electric wires and other similar equipment. Ceilings hang from hangar bars, buried by the head, with a protruding end, in the concrete overhead.

In New York it is standard practice



Carrier bars are bolted to hangars, 5 feet apart. To them, at 12-inch intervals, are attached furring bars by means of clips.



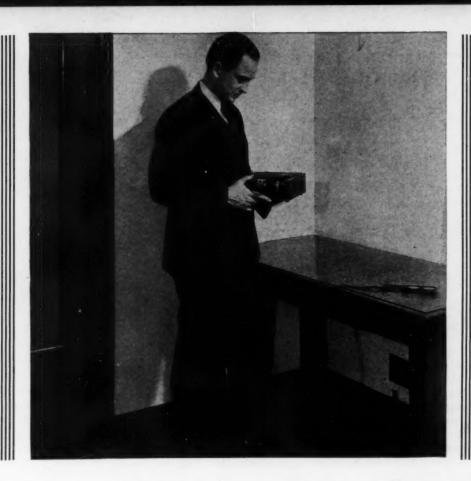
Wire mesh is attached to metal lath by corrosion resistant wire.



Corrosion resistant tie wire is looped about the furring bars at 6-inch intervals by means of pliers. This wire is the only support for the lathing and plaster after the ceiling is completed.

to bolt carrier bars to these hangars every 5 feet. Furring bars are clipped at distances of 1 foot to the carrier bars. Expanded metal lathing to which the plaster is applied is fastened at 6-inch intervals to the furring bars with tie wire. The difficulty centered about this tie wire, the investigation disclosed. It had been the custom to use galvanized steel wire No. 18 gauge for this purpose. Corrosion of the wire was discovered in each inspection at the point at which it came out of the plaster to loop around the furring bars. The slow drying moisture of the plaster, which condensed on the metal in the air-tight chamber, was held responsible. The weight of the plaster-between 8 and 9 pounds a square foot-had caused the corroded wire to let go.

This fact was responsible for a change in existing specifications. A dead soft annealed corrosion-resisting tie wire was substituted. In consequence no further failures have been reported. The original cost, while somewhat higher, is economical in the long run because it eliminates repair bills and forestalls damage proceedings.



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NEWS IN REVIEW

Oregon Trail

When such live issues as teachers' loyalty oaths, the "red rider" to the District of Columbia appropriation bill and compulsory R. O. T. C. are brought on to the convention floor for thorough airing and decisive action, an N. E. A. convention is not likely to be a dull affair.

The 10,000 teachers and administrators who drove through mountain passes or sped in streamlined trains or boarded transcontinental planes for Portland, Ore., did not find the time between June 28 and July 2 hanging heavy on their hands.

The cool lakes, mountain peaks and river drives which they encountered en route served to temper some of the heat of the discussions, and ready Western hospitality also helped to soothe the indignation of these hard working public servants grown more than a little weary of charges of communism, pacifism, atheism and what not.

Prepared to do battle for their academic freedom on a more united front, the educators also struck back at certain specified school boards for unwarranted ousting of competent teachers. Not only did the convention stand behind the report of its tenure committee, but it voted it a grant of \$10,000 for next year to continue its new policy of investigating and reporting cases of unjust treatment of teachers.

Before packing up for the next leg of their summer tour or before enrolling in the numerous summer conferences and courses available on the West Coast, the delegates selected their leaders for the year 1936-1937.

Officers, the majority of whom are from the West and South, are as follows:

President, Orville C. Pratt, superintendent of schools, Spokane, Wash.; first vice president, Agnes Samuelson, state superintendent of public instruction, Iowa; vice presidents, Herman E. Hendriz, state superintendent of schools, Arizona; Evelyn Chasteen, teacher, Oakland, Calif.; E. W. Butterfield, state commissioner of education, Connecticut; Andrew Avery, county superintendent of schools, Bainbridge, Ga.; M. P. Moe, executive secretary, Montana State Teachers Association; Mattie S. Doremus, teacher, Paterson, N. J.; Marie Brotterson, teacher, Kansas City, Kan.; W. L. Colvin, high school principal, Jeanerette, La.; Willie A. Lawson, secretary, Arkansas Education Association; O. H. Plenzke, secretary, Wisconsin State Association, and Ernest H. Black, president, Oklahoma Education Association. The new treasurer is R. E. Offenhauer, superintendent, Lima, Ohio.

INSTRUCTION

Curriculum Conference

At Western State Teachers College, Kalamazoo, Mich., on July 23, was held a curriculum conference, with Hollis L. Caswell of George Peabody College as guest speaker. Doctor Caswell is consultant for state instructional and curriculum programs in Alabama, Arkansas, Florida, Kansas, Mississippi, Tennessee and Virginia. Other speakers were Dr. T. S. Henry and Dr. Eugene B. Elliott.

Small Scale Start

A junior college will be opened at Pawhuska, Okla., this fall, in the high school building, and six or seven first-year college subjects will be offered. Instructors will be selected from among those high school teachers who have a master's degree or its equivalent. Tuition will be set at the bare cost of the additional instruction, between \$50 and \$60. An enrollment of twenty-five is expected.

Planned Assimilation

Estimating that the manufacturing industries of Poughkeepsie, N. Y., could assimilate forty graduates a year from the Three-Year Unit Trade School if the boys were more or less evenly distributed throughout the year, the Manufacturers Association survey committee recommended that applicants be permitted to enter the school at any time during the year and graduate whenever they complete their work.

The committee, which has just completed a survey of the school made at the request of the board of education, proposes improvements that are estimated at \$60,000. It asks that the school be housed in a building industrial in type, pointing out that the small classrooms of an ordinary school handicap the work of a trade school.

That boys are accepted for entrance at too young an age and graduated before they are old enough to qualify for employment was emphasized by the report, which recommends that applicants to the school be sixteen years of age and have an academic background of two years of high school work. The school, according to the committee, should operate on a five-day week, eight hours a day for forty-nine weeks of the year.

The formation of an advisory board of five men selected from the manufacturing industries to counsel with and advise the board, was also suggested.

Asiatic Studies

A seminar in Asiatic studies was offered for the first time in this country at the University of Southern California this summer, with Dr. Hans N. von Koerber conducting the course. Buried cities, unexplored lands, forgotten languages and their influence on modern civilization were considered in the class.

Janitors' School

Holding that the "forgotten man" in the school organization has been the school custodian, the Central State Teachers College, Mt. Pleasant, Mich., this year conducted its second annual Janitors Institute on July 9 and 10 under the direction of E. D. Kennedy, superintendent of schools at Clare, Mich. Among the speakers on the two-day program were Chester F. Miller, superintendent of schools at Saginaw: R. V. Gay, St. Johns, architect; Edward Warren, foreman, University of Michigan janitorial staff; George H. Draper, head engineer, Northern High School, Detroit, and A. C. Lamb, superintendent of buildings and grounds, Hamtramck.

PERSONNEL

Teaching Prowess Rewarded

To recognize and reward teaching and service of unusual and outstanding merit and to set up goals for teaching comparable in remuneration and rank with high administrative positions, Culver Military Academy has created a new grade and rank in its academic faculty.

An appointee to this new grade is designated as Master Instructor with the rank of colonel in the school organization. Two appointments of this grade have been announced by the board of directors—J. S. Fleet, chairman of the foreign language department, and R. H. Mowbray, chairman of the social science department.

Marriage and Tenure

School teachers under tenure may not be dismissed on the sole grounds that they are married, according to a decision handed down by the Supreme Court at Trenton, N. J. The court, upholding Charles H. Elliott, state commissioner



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of education, and the state board of education declared that, "The fact that a female public school teacher under tenure is married does not constitute a legally sufficient reason for the argument that a married woman, on account of her duties to her husband and family, is not as well qualified to perform those of a teacher in addition, but this is a matter for the Legislature."

Compulsory Graduate Study

Effective July 1, teachers in the La Salle-Peru Township High School and La Salle-Peru-Oglesby Junior College, La Salle, Ill., must attend the graduate school of an approved college or university for at least six weeks once in each three years if they hold a bachelor's degree, and once in five years if they hold a master's degree. It is the policy of the school board to demand a master's degree, as far as is practicable, of all of its secondary school teachers in view of the fact that they are called upon to teach in either the high school or the junior college.

BUILDINGS

Architectural Survey

A survey of styles in the architecture and design of school buildings has been approved by the board of education of New York City. The object of the study, for which \$30,000 was appropriated, is to obtain greater beauty at less cost in the construction of these buildings. Five architects will start the survey in the fall, and it is expected that the study will take several months.

Expansion Complete

The expansion program, which was mapped out for Baylor School, Chattanooga, Tenn., in 1914, when the school erected its first building on its new site, will be completed this year, with the construction of a \$35,000 dormitory. The new building, which will be three stories high and English in architecture, will provide accommodations for twenty-five or thirty pupils, five or six classrooms, and apartments for two married teachers. Pringle and Smith, Atlanta, are the architects.

Island Schoolhouse

Though it has only two pupils, when one of them descended upon the board of education of Ventura, Calif., and pleaded for a new school for San Nicolas Island, the board voted \$75 for the construction of a structure on this county outpost, sixty-five miles off the mainland. The island is about eight miles long and three miles wide and is occupied by a few sheepherders.

Military Movements

The Oneonta Military Academy, Pasadena, Calif., has purchased a five-acre tract of ground just south of Alhambra, to which the school will be moved. Standing on the tract at the present time is a business administration building, which will be used as an administration building by the school. Two dormitories and a classroom building are to be erected in time for the opening of school in the fall.

Education in Glass

Built without outside walls or with glass brick ones, the new home of the Helen Bush School, Seattle, is to follow in architectural design the type originally developed in Germany about fifteen years ago. Most of the classrooms will have a southern exposure and outdoor areas will be covered with glass for recreation periods during inclement weather. Each room of the lower school will have an outdoor classroom, as designed by John T. Jacobsen, architect. The new plant, which will include a playfield with gymnasium and swimming pool, auditorium, dormitories, an administration section, a library and classrooms for both upper and lower schools, is being erected on the site the school occupies at the present time.

Enlarged Quarters

An additional building acquired by Marymount College, Tarrytown, N. Y., will provide an extension of its activities in its New York City school. A five-story residence at 1027 Fifth Avenue adjoining its present New York headquarters will be used for junior and high school classes while preprimary and primary classes will be continued in the original building. This school is operating in conjunction with the Tarrytown institution and offers the same courses of study so that pupils may transfer at any time.

Treeless Grounds

At least one school ground in each South Dakota County will be adquately planted with trees during the coming year, if the plans of Frank I. Rockwell, state college extension forester, are carried out. Only 7 per cent of the rural school grounds in the state have enough trees for a shelterbelt, and more than 80 per cent have not a single tree, it is declared. Mr. Rockwell is working through county agents, county superintendents, teachers and school boards in this demonstration of what can and should be done. In some communities home demonstration clubs are lending a hand, carrying out a course of study in landscaping that will be applicable both to school grounds and homes.

FINANCE.

Military Turns Cooperative

A cooperative purchasing unit for boys' schools has been established by purchasing agents of a group of eastern military schools as a result of a conference held in New York City. This will be known as School Purchasing, Incorporated. The officers are: Maj. Charles Barber, Norwich University, president; Brother Richard, La Salle Military Academy, Oakdale, L. I., vice president, and W. K. Russell, Farragut Academy, Toms River, N. J., secretary-treasurer.

Trimmed

Undernourished children will not be fed in the schools of Buffalo, N. Y., next year. The board of education has announced that it will be operating on the smallest budget it has had in ten years, forcing it also to close one elementary school and three annexes, postponing the opening of a new high school until midyear, and cutting down the number of new teachers to be named to ten. The school playground program is to be dropped. The budget was trimmed by more than \$900,000, after a campaign by the United Taxpayers' League for a less costly school system.

Soap in the Budget

"The schools expend a lot of time teaching hygiene and they don't bother getting soap." Mrs. Henry S. Pascal, president of the United Parents Association, appeared before Col. Walter Jeffreys Carlin, chairman of the committee on finance and budget of the board of education, New York City, and demanded soap, towels, wash basins and lavatory attendants for school children in that city. Colonel Carlin, after receiving requests from forty-one organizations for increased school spending, declared that the basic budget of the New York school system for 1937 would be approximately \$141,089,057, an increase of \$4,000,000 over 1936.

OCCUPATIONS

Career Students

Sixteen high school pupils, eight boys and eight girls, are "career students in municipal government" in New York City upon invitation of Mayor La Guardia. These pupils, selected from each borough by the division of vocational schools of the board of education, are working during July and August for the city government. They receive an honorarium of \$50 a month, from an allocation of funds collected last year at a police-firemen baseball game. Five of

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the pupils are assigned to the offices of the various borough presidents and the rest to the city departments, in order that they may learn something of the workings of the city government.

Dental Science

"Dentistry as a Career" is a new pamphlet by L. E. Blauch, Ph.D., executive secretary of the survey committee, American Association of Dental Schools. It was especially prepared for guidance purposes, and gives a frank and accurate picture that should be helpful both to vocational directors and prospective dental students. Copies may be obtained for ten cents each from the Chicago Dental Society, 30 North Michigan Avenue, Chicago.

Early Choice

A surprising number of pupils have decided upon their life work even before they have reached the sophomore year in high school, it is indicated by the mental testing and questionnaire program given Michigan pupils.

Of the 15,275 pupils questioned, 11,149 had planned their life work. Most of them made their choices in the freshman year, but large numbers had done so in the seventh and eighth grades.

If future surveys show that pupils hold to their choices, it indicates the need for vocational guidance in the schools much earlier than has been thought necessary, states Prof. Clifford Woody of the University of Michigan school of education, who analyzed the data for the High School Principals Association.

LEGISLATION

Federal Aid

The new George-Deen Act, recently signed by the President, for the development of vocational education becomes effective July 1, 1937, replacing the George-Ellzey Act, the three-year appropriation for which expires next year. The new measure increases by \$9,090,-397 the sum authorized for vocational education in agriculture, trade and industry, and home economics. It increases by \$1,054,000 the sum authorized for training teachers in this field. States and territories, under the new law, will need to match federal grants by 50 per cent for the first five years, this percentage being increased by 10 per cent each year until it reaches 100 per cent in 1946.

Free Tuition

The problem of out of school and unemployed youth and the need for more adequate provision for the seventh and eighth grade pupils enrolled in rural schools resulted in the passing of the following resolution by the Michigan Educational Policies Commission at its recent meeting at Lansing.

"That it be the recommendation of the commission that legislation be secured to extend the payment of tuition by the state for nonresident pupils attending the seventh and eighth grades and to provide for the inclusion of students in the thirteenth and fourteenth grades in the membership computation of schools applying for state aid when the instruction of such students is provided as part of the approved program of the school district; and, further, that legislation be secured to provide for the payment of tuition by the state for nonresident students enrolled in the thirteenth and fourteenth grades at the same rate as the tuition for the secondary school level."

If this legislation is secured it is believed that an increase will take place in the number of seventh and eighth grade pupils transferring from the single room rural schools to neighboring graded schools, and in the number of high school graduates returning for postgradnate work.

ADULT EDUCATION

Administrative Center

A five-story building has been leased by New York University to be used as the administrative center of the division of general education. The new quarters will provide much needed space for the development of a rapidly expanding adult education program. Last year more than 15,000 persons were enrolled in this division, a two-year gain of about 100 per cent.

Canadian Cooperative Education

Originally conducted as an experiment in Nova Scotia, the program in cooperative education offered by the extension department of St. Francis Xavier University is now the focus of national attention. The story of communities that have been taken off relief by the cooperative action of the people themselves has been investigated by Parliament with the view of introducing the technique throughout the Dominion.

When the university began its pioneer work in cooperative education, thousands of Nova Scotia fishermen and farmers were economically hopeless. They were first organized into study groups to work out plans of action for themselves, being guided by the extension workers through the mazes of cooperative marketing, purchasing and credit. These fishermen now own their

own lobster canneries, fish plants, warehouses, stores and credit unions.

It is intended that Parliament shall undertake to spread the plan through all of the maritime provinces during the present year.

MEETINGS

County Superintendents

Approximately 100 county school superintendents from Washington, Montana, Oregon, Idaho, California, Ohio. Nebraska and Iowa attended a two-day Western Regional Conference of County School Superintendents held in Portland. June 26 and 27, immediately prior to the N. E. A. meeting.

Among those appearing on the program were H. S. Alvis, specialist in state school administration, U. S. Office of Education; Dr. Francis L. Bailey, state superintendent of public instruction of Vermont; Dr. E. I. Sisson, professor of education, Reed College; Dr. Howard A. Dawson, director of rural service, National Education Association; Dr. David Segel, educational consultant and specialist in tests and measurements, Office of Education, and Dr. Willis A. Sutton, superintendent of schools, Atlanta, Ga.

Other features on the program were a panel discussion on "Factors Ensuring the Success of a County School Superintendent's Work," and a symposium on "Significant Phases of a Successful Program of County School Supervision and Administration."

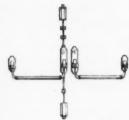
Texas Business

A panel discussion on financing education in Texas and formal papers on current business problems in education marked the second Texas regional meeting of the National Association of Public School Business Officials held in Austin, June 26 and 27. Dean B. F. Pittenger of the school of education, University of Texas, led the panel.

Food Purchasing

Visits to school cafeterias in and about New York City are being planned as part of the program for the Conference of Food Service Directors to be held October 2 and 3 in New York City. The subject of purchasing has been selected for round table discussion. The purchasing of fruits and vegetables will be outlined by W. C. Huckleman from the Federal Department of Markets, while D. G. Cummins of the same department will discuss meats. "Purchasing Standards" is the subject assigned to A. E. Idell of the board of education, Philadelphia. Another important name added to the program is that of Dr. Walter P. Eddy.





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PUBLICATIONS

Weekly Moccasin

Lakefield, Minn., has a population of 1,349 and every resident is cognizant of what is happening in the schools of Lakefield and of Jackson County. The Lakefield Standard, the local newspaper, comes out every Thursday. One page of it is streamered "The Weekly Moccasin" and is "edited and published by the faculty and pupils of the Public School in the interest of Lakefield education." Another page has two columns of Rural School News, divided by districts.

What make these pages valuable are the summaries they contain of classroom studies. The first grade visits the post office. Presumably, the teacher writes the news for this grade, but she quotes the children. For example:

"I asked Mr. Comstock if they had a Nixie. Mr. Comstock said that they did have a Nixie. Then he showed us a letter we couldn't tell who it belonged to."

Humor creeps in too. From Rural School District No. 127: "Rosella brought a date plant to school. It seems someone tried to hide in a flower pot the fact that he had swiped a date, but it grew up on him."

A feature of "The Weekly Moccasin" is a series of articles by Ross N. Young, principal of the Marshall High School, Minneapolis, on "What Does the Good School Citizen Do?" and similar topics.

By Teacher, for Parent

Teachers Talk is the name of the publication being issued by the York City Education Association, York, Pa., as a part of its public relations program. Its first issue was published recently.

VISUAL EDUCATION

Class Demonstration

A class of progressive high school pupils discussed current photoplays for the benefit of the Department of Secondary Education at the convention of the National Education Association in Portland, Oregon. Shown to the pupils and educators assembled in one of the largest motion picture houses in the city were a preview of a new screen biography of Shakespeare, which includes the balcony scene from Romeo and Juliet, as interpreted by Norma Shearer and Leslie Howard; an issue of the March of Time

presenting both sides of a current controversial problem, and "The Face of Britain," an outstanding example of the new British documentary type of photoplay.

These were discussed as cultural and social instruments by a representative group of forty high school boys and girls, who were led in their discussion by Fannie L. Barber, teacher of photoplay appreciation in the Washington High School, Portland, and Dr. William Lewin, chairman of the motion picture committee of the Department of Secondary Education.

"The great increase in high school enrollment has made it necessary to convert the high school into a people's university," said Doctor Lewin. "By correlating the movie, radio, newspaper and magazine habits of young America with educational procedures, we are able to build a greater interest in citizenship and self expression."

Rural Film Strips

Prices for film strips issued by the U. S. Department of Agriculture until June 30, 1937, will range from 50 cents to \$1.10 each, depending upon the number of illustrations in the series. The majority of the 275 series will sell for either 50 or 65 cents each. Film strips are available on crops, dairying, farm animals, farm forestry, plant and animal diseases and pests, farm economics, farm engineering, home economics, and adult and junior extension work. Lecture notes are provided with each film strip purchased.

Classified Films

"The Educational Film Catalog" is a classified list of 1,175 nontheatrical films compiled by Dorothy E. Cook and Eva Cotter Rahbek-Smith. Full information is given regarding each film: the title as listed by the producer; the length of time to run; width; whether it is sound or silent; whether it is inflammable; copyright date or release date; sale or rent price, and name of producer.

The catalogue follows the form of the Standard Catalog for High School Libraries, with part one a classified list and part two a title and subject index. The films are classified according to the Dewey Decimal classification in a somewhat simplified form. The films included in the list were selected through the advice of many educators, on a comparison of selected lists of films and on consultation with producers and others interested in nontheatrical films.

The catalogue is published by the H. W. Wilson Company, 950 University Avenue, New York City, and sells for \$2. It will be kept up to date with quarterly supplements.

Films for the School Screen

XII-Russia

of Day in Moscow—A fast moving study of the leading city of the U. S. S. R., with music and English titles. 2 reels. 16 mm., sound. For rent. Garrison Film Distributors, Inc., 729 Seventh Avenue, New York City.

Russia—Shows condition of the people under the Czarist régime and the change, whether for good or otherwise, which has taken place since the formation of the Soviet government. 2 reels. 16 mm., silent. For rent or purchase. Edited Pictures System, Inc., 330 West 42d Street, New York City.

Land of the Midnight Sun—Eskimo life along the coast of Siberia and Alaska in summer. Plover Bay, Emma Harbor and customs and costumes of natives. 1 reel. 16 mm. or 35 mm., silent. For rent or purchase. International Educational Pictures, Inc., 40 Mount Vernon Street, Boston.

Forest People of Ude—Life and customs of a primitive tribe in a remote Ussurian region; reaction of these people to civilization. 2 reels. 35 mm., silent. For rent or purchase. International Educational Pictures, Inc., 40 Mount Vernon Street, Boston.

The Gates of the Caucasus—Ascending Mount Kazbek; primitive modes of mountain tribes of Georgia; military highway. 4 reels. 35 mm., silent. For rent or purchase. Amkino Corporation, 723 Seventh Avenue, New York City.

The Golden Gate to Siberia—Life in Vladivostok. 1 reel. 16 mm., silent. For rent or purchase. Bell and Howell Company, 1801 Larchmont Avenue, Chicago.

Moscow and Siberia—General view of Moscow; journey through Crimea and Lake Baikal. 1 reel. 35 mm., silent. For rent or purchase. Pinkney Film Service, 1028 Forbes Street, Pittsburgh, Pa.

Old and New—Dramatization of agricultural progress in U. S. S. R., directed by S. M. Eisenstein. 7 reels. 35 mm., silent. For rent or purchase. Amkino Corporation, 723 Seventh Avenue, New York City.

Russia Today—Travelogue by Carveth Wells. 4 reels. 35 mm., sound. For rent or purchase. Principal Distributing Corporation, 1501 Broadway, New York City.

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NAMES IN NEWS

New Superintendents

WILLIAM M. SMITH, superintendent of schools at Monmouth County, New Jersey, has been appointed superintendent of schools at Long Branch. N. J., to succeed CHARLES T. STONE. who has held that position for twentyfive years.

IRENE Snow, principal of the Shearer School, Napa. Calif., has been appointed district superintendent of elementary schools to replace DAVID J. HENRY, who is retiring because of ill health.

WALTER G. CLARK, assistant county superintendent of schools at Tioga County, Pennsylvania, has been appointed county superintendent to succeed the late E. E. MARVIN.

SHERMAN H. FREEMAN, principal of the Perris Union High School, Perris. Calif., for seven years, is resigning from that position on July 1 to accept the superintendency of the Vista Unified School District, Vista, Calif.

W. J. LOWREY of Gallatin, Mont.; has been elected superintendent of schools at Springfield, Ill. He succeeds the late FRANK T. VASEY.

CARROLL LONG was recently elected to the office of superintendent of schools for Irwin County, Georgia, to succeed the late J. B. CLEMENTS.

BENJAMIN KLAGER, superintendent of schools at Manistee, Mich., has been appointed to the superintendency at Bay City, Mich., succeeding G. L. JENNER.

L. M. WIKRE, superintendent of schools at St. James, Minn., has been appointed superintendent of schools at Crookston, Minn. He will be succeeded at St. James by E. L. VITALIS.

H. E. ELLIOTT, superintendent of schools at Three Forks, Mont., has accepted the superintendency of the Powell County High School, Deer Lodge. He will be succeeded at Three Forks by HARRY SHEARSON, superintendent of schools at Drummond, Mont.

WALTER R. FRENCH, superintendent of schools at Mead, Neb., has been appointed superintendent of schools at Stromsburg. Neb., where he succeeds R. B. CAREY, who resigned to accept the superintendency of schools at Gering, Neb.

NORINE B. KEATING, vice principal of Watervliet High School, Watervliet. N. Y., has been chosen superintendent of schools for Green Island, Albany,

Dr. Norman W. Cameron has been appointed superintendent of schools at Garfield, N. J. Doctor Cameron was formerly president of West Chester State Teachers College, Pennsylvania.

W. R. HILL, principal at Richwood. Ohio, has been appointed to succeed

W. E. BEEMAN as superintendent of schools at Richwood. Mr. Beeman, who has been superintendent for fifteen years, did not apply for reappointment.

R. O. TATE, superintendent of schools at Mulhall, Okla., has been appointed superintendent at Otwell, Ind.

P. M. BURKE, supervising principal of Mt. Carmel Township schools, Mt. Carmel, Pa., has been advanced to the office of district superintendent of schools.

HERMAN COUSER was elected superintendent of schools at D'Hanis, Tex., to succeed VIRGIL D. CURRIN, who left to accept the superintendency of schools at Dilley, Tex. C. D. PARKER, superintendent at Dilley, has been made district supervisor of vocational agriculture.

REGINALD STEVENS KIMBALL, for the past six years superintendent of schools in Massachusetts School Union No. 10 (Brookfield, East Brookfield and North Brookfield), has gone to School Union No. 8 (Brimfield, Monson and Wales), with headquarters at the Monson Town Hall. He will be succeeded in the Brookfields by Rhoden B. Eddy, former superintendent of School Union No. 41.

Assistant Superintendents

ROBERT L. HAYCOCK, assistant superintendent of public schools in charge of white elementary schools, Washington, D. C., has been promoted to the office of first assistant superintendent to succeed the late DR STEPHEN E. KRAMER. Through a reorganization of the school system, Mr. Haycock will retain his supervision over the elementary schools, and in addition have general supervision over the junior and senior high schools and Wilson Teachers College. Two superintendents will be appointed to assist him. Doctor Kramer, who became a member of the District school system in 1890 and was made assistant superintendent in 1914, was stricken by a heart attack while attending the commencement exercises of George Washington University.

DRUMMOND J. McCunn, business assistant to the superintendent of schools at Pasadena, Calif., has been promoted to the office of assistant superintendent.

MELVIN L. REYNOLDS, principal of the grade school at Port Byron, Ill., has been appointed assistant superintendent of schools and truant officer of rural schools for Rock Island County.

ROM WILLIS, principal of Windsor High School, Lawrence County, Ohio, has been appointed assistant county superintendent of the Lawrence County schools.

WILLIAM E. TIETBOHL, who on June 8 was dismissed by the Connellsville, Pa., board of education from the posi-

On the Air During August

The following programs of particular interest to school people are arranged by the National Broadcasting Company, the Columbia Broadcasting System and the Mutual Broadcasting System. The time is Eastern Daylight Saving except when otherwise specified.

National Farm and Home Hour!—1:30-2:30 p.m. (NBC-WJZ).

Monday

Children's Songs, Stories and Novelties, Dorothy Gordon—5:15-5:30 p.m. (CBS-WABC). Safety Musketeers, talk, music and dramatization, U. S. Office of Education—4:00-4:15 p.m. (CBS).

Education-in-the-News, U. S. Office of Education—7:45-8:00 p.m. (CBS).

Have You Heard? (Introductions to fascinating corners of natural science) U. S. Office of Education—3:45-4:00 p.m. (NBC-WJZ). Science Service Series, Watson Davis, Editor-4:30-4:45 p.m. (CBS).

Wednesday

Grant Park, Chicago, Band and Orchestra Concerts—9:00-10:00 p.m. (NBC-WJZ).

Thursday

Radio Guild's Historical Dramas—4:30-5:30 p.m. (NBC-WJZ).

Answer Me This (Self tests in the social sciences behind the news)—5:30-5:45 p.m. (NBC-WEAF).

Portland Symphony Orchestra, Basil Cameron, conductor—8:00-9:00 p.m. (CBS).

Friday

Magic of Speech—2:00-3:00 p.m. (NBC-WEAF).

Grant Park, Chicago, Band and Orche Concerts-10:00-10:30 p.m. (NBC-WJZ).

Saturday

Beethoven Sonatas, violin and 'cello, Berezowski and Bay—11:30 a.m.-12 m. (CBS). New York Philharmonic Symphony Society, Lewisohn Stadium, 9:00-10:00 p.m. (NBC).

The World Is Yours, Smithsonian program—11:30-11:45 a.m. (NBC-WJZ).
University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).
Speakers and Events in International Field (transatlantic broadcast)—12:45-1:00 p.m.

(CBS).
Titans of Science—7:00-7:15 p.m. (MBS).
Robin Hood Dell Concerts, Philadelphia Symphony Orchestra—8:30-10:30 p.m. Final concert, Aug. 8. (CBS).
Ravinia Concerts, Chicago Symphony Orchestra—10:00-10:30 p.m. (NBC-WJZ).

Except Sunday.

Also Wednesdays and Fridays.

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You need some vehicle of expression with which to interpret or to sell your educational program, its objectives and ideals to your community.

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Department of Education

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Lockerobe "Teacher Control" also provides simultaneous opening and closing of all doors by the operation of one pair of master control doors. Thus noise, confusion, and possibility of injury amons pupils from individually operated doors, is avoided. Medart "Teacher Control" of the wardrobe problem is complete.

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Both are important! And this double saving — safety and efficiency — is yours for a very moderate price in a Dayton. That is why Daytons are used in so many leading schools.

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DAYTON Safety Ladder

Stock carried on Pacific Coast by E. D. Bullard Co., Los Angeles and San Francisco, and by 160 other distributors from coast to coast. Made and distributed in Canada by Safety Supply Co., Toronto.

Coming Meetings

Aug. 16-28-American Federation of Teach-

Sept. 27-29—Council of School Superintendents, Saranac Inn, N. Y.

Oct. 2-3—Conference of Food Service Di-rectors, Hotel Commodore, New York

Oct. 7-9-New Hampshire State Teachers Association, Littleton.

Oct. 8-10-Vermont State Teachers Association, Burlington.

Oct. 12-16—National Association of Public School Business Officials, St. Louis.

Oct. 15-17-Wyoming Education Associa-Laramie.

Oct. 22-23—Indiana State Teachers' Association. Indianapolis. Oct. 22-24-Mississippi Education Associa-

tion, Jackson Oct. 22-24-Rhode Island Institute of In-

struction. Providence Oct. 23-24-Maryland State Teachers' As-

sociation, Baltimore 29-30-Maine Teachers' Association,

Oct. 29-30-Lewiston.

Oct. 29-31—Montana Education Associa-tion, simultaneous meetings at Helena, Kalispell, Great Falls and Billings.

Oct. 29-31—Utah Education Association, Salt Lake City. Oct. 30-Connecticut State Teachers Asso-

ciation. Hartford. Nov. 4-6—North Dakota Education Association, Grand Forks. Nov. 5-7—Colorado Education Association, simultaneous meetings at Denver, Pueblo and Grand Junction.

Nov. 5-7—Iowa State Teachers Association, Des Moines.

Nov. 5-7-Minnesota Education Association, St. Paul.

Nov. 6-7—Kansas State Teachers Associa-tion, simultaneous meetings at Topeka, Salina, Hays, Garden City, Hutchinson, Winfield, Coffeyville and Fort Scott.

Nov. 9, week of—Delaware State Education Association, Wilmington.

Nov. 11-14-Missouri State Teachers Association, Kansas City.

Nov. 12-14—Arizona State Education Association, Tucson.

Nov. 12-14-West Virginia State Education Association, Huntington.

Nov. 13-16—New Jersey State Teachers' Association, Atlantic City.

Nov. 22-25—South Dakota Education Association, Rapid City.

Nov. 26-28—Texas State Teachers Association. Fort Worth.

Dec. 10-12—National Conference on Educa-tional Broadcasting, Washington, D. C.

Dec. 28-30—Pennsylvania State Teachers Association, Harrisburg.

Feb. 20-25—Department of Superintendence, National Education Association, New Orleans.

-American Association of Junior Colleges, Dallas, Tex

tion of principal of the high school, has been elected to the newly created office of assistant superintendent of schools. This move followed a mass meeting of citizens who sought an explanation from the board of their four-to-three vote on the removal of the schoolman who had served as principal for twenty years. Protesting that his removal was injurious to the educational system, they demanded his reinstatement. The board had already hired PAUL H. WALKER to succeed Mr. Tietbohl and feared it would be liable to a surcharge if two principals were elected. However, it was held that the board was vested with authority to create new positions. In view of this the three board members who had voted in favor of retaining Mr. Tietbohl suggested that he be made assistant superintendent, which was done unanimously. The per capita tax assessment of the district is made upon 3,100 persons. Of these 2,086 had signed a petition protesting the board's action, as had 227 pupils.

New Supervising Principals

COL. CLYDE A. FASICK, headmaster of Sewanee Military Academy, Sewanee, Tenn., has been elected supervising principal of the Juniata Joint High School, now under construction at Mifflintown, Pa.

IRVING R. GLADSTONE, principal of the Pulaski Academy and Union High School, Pulaski, N. Y., has been appointed supervising principal of Addison High School, Addison, N. Y., the appointment to take effect beginning in September.

GEORGE HOLLIBAUGH was recently elected to succeed IRA T. LACKEY as supervising principal of the Fredonia-Delaware Vocational School, Fredonia.

GEORGE W. R. KIRKPATRICK, principal of the junior high school at Marcus Hook, Pa., has been appointed supervising principal of the borough school at Folcroft, Pa.

New Principals

FREDERICK W. KOCH, vice principal of Galileo High School, San Francisco, has been appointed principal to succeed JOSEPH F. NOURSE, new superintendent of schools. WILLIAM H. FAWCETT was promoted from the vice principalship to the principalship of the Horace Mann Junior High School. LAWRENCE M. CHILDERS is to succeed JOHN F. BRADY as principal of Everett Junior High School and Ernest J. Cummings will be the new principal of the George Washington High School.

M. B. Combs, principal of the high school at Port Lavaca, Tex., was elected principal of the Lockhart High School, Lockhart, Tex.

WILLIAM C. Evans, principal of the high school at North Braddock, Pa., resigned from that position to become principal of the high school and assistant superintendent of schools at Braddock, Pa. He will be succeeded at North

Braddock by GALE KIRSCHNER, a teacher in the high school.

MILTON H. KUHLMAN, member of the faculty of the high school at Stillwater, Minn., has been appointed principal of the school to succeed the late J. O. JOHNSON.

GILBERT BALL, principal of the high school at Morristown, N. Y., has been chosen to succeed J. L. CUMMINGS as principal of the high school at Clayton. N. Y. Mr. Cummings, who has been head of the school for twenty-eight years, is retiring.

O. F. PEDDICORD, principal of the Hunt Memorial School, Freeville, N. Y., has been appointed to succeed Mr. Ball.

FRANK HAMMOND, superintendent of schools of Steuben County, Indiana, for the last three years, has announced his resignation in order to accept the principalship of the high school at Speedway City, a suburb of Indianapolis.

W. F. Huston, for the last six years principal of the school at Andover, Ill., has been appointed principal of the high school at Colona, Ill., where he succeeds C. F. SHEETS.

LEHMAN A. HOEFLER, English teacher in the high school, has been appointed successor to EARLE T. McLAUGHLIN. principal of the high school at Plainfield, Conn. Mr. Hoefler will serve as vice principal for one year under the superintendent of schools, and then automatically will become principal.

W. NATHAN WILSON, supervisor of secondary education, San Bernardino, Calif., has been appointed principal of the Ramona Junior High School, now under construction. ELSIE GIBBS, high school teacher, will succeed him in the supervisory capacity. HARRISON C. Mc-MILLIN, principal of Sturges Junior High School, was recently elected principal of the senior high school at San Bernardino, to succeed George R. Momyer, who resigned after eleven

RUSSELL B. MARSHALL has been appointed principal of the Lawrence High School at Falmouth, N. Y., succeeding BLYN E. DAVIS, who recently resigned.

Further Appointments

ELLSWORTH MILLER, principal of the Clinton Heights Union Free School, Rensselaer, N. Y., was named director of the second supervisory school district of Columbia County.

WALTER O'LEARY, former lecturer at Fordham University and one time chief attendance officer of the Bronx, has been named assistant director of the bureau of attendance of New York City.

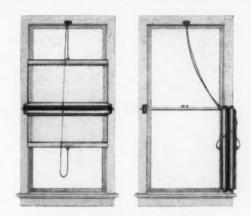
E. D. McKinnon has been appointed superintendent of school buildings at St. Paul, Minn., to succeed I. E. GOTTLIEB.

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director of all music activities in the Omaha schools. Mr. Davis was formerly in charge of the supervision of music in the office of the state superintendent of Missouri.

Private School Personnel

THE REV. L. HAROLD HINRICHS, rector of St. John's Protestant Episcopal Church, Boonton, N. J., has been appointed headmaster of St. John's School, Mountain Lakes, N. J. He will work with Mrs. Henry B. Wilson, widow of the founder of the school and its headmistress.

MARY P. RUTLEDGE, former supervisor of elementary education at Maryland State Teachers College, has been appointed principal of the Brooklyn Ethical Culture School, Brooklyn, N. Y.

WHITTON E. NORRIS, a member of the faculty at New Hampton, New Hampton, N. H., has been appointed headmaster of the Ashburnham School for Boys, Ashburnham, Mass., where he succeeds Harry Robinson Dane.

Col. B. M. Roszel, superintendent of the Shenandoah Valley Military Academy for nearly thirty years, resigned at the 151st commencement exercises of the institution.

Retired

DR. J. T. Hundley, for twenty-one years president of Lynchburg College, Virginia, resigned on July 1. He will become president emeritus and director of financial promotion. Dr. Riley B. Montgomery, associate president of the college since March, 1924, was elected president.

T. K. Johnston, superintendent of schools at McKees Rocks, Pa., for twenty-five years, announced his retirement effective August 1, although his contract has two more years to run. W. H. Church, principal of the high school, has been chosen his successor, and Maurice Ardner, mathematics teacher, will in turn succeed Mr. Church as principal.

E. H. Pattison, superintendent of the Clermont County, Ohio, school system, is retiring on July 31. He will be succeeded by Frank B. Hoggatt.

ARTHUR B. SCOTT, principal of the Morse High School, Bath, Me., for the last eleven years, and a teacher in the Bath school system for seven earlier years, has announced his retirement. He will be succeeded by HORACE P. HERRICK, a teacher.

JOHN E. SHRUM, who became principal of the Hollidaysburg High School seven years ago when he came to Hollidaysburg, Pa., from Indiana, Pa., has announced his retirement at the close of the present school term.

JOHN LESLIE CUMMINGS, principal of

Clayton High School, Clayton, N. Y., has announced his resignation after having headed the school for twenty-six years. At the request of the board, Mr. Cummings will remain with the school system for two or three months of the fall term to assist his successor.

JOHN M. BEAUMONT, principal at Technical High School; D. T. THOMAS, principal of the Bryant School; JAMES H. FULLER, principal of the Whitney School; ELIZABETH B. GAUGHAN, principal of the Farragut School, and M. H. JORDAN, vice principal of Central High School, are all being retired by the Scranton, Pa., school board in June, in accordance with the establishment of a retirement age of sixty-seven.

MRS. KATE HOPE LIVINGSTON, principal of the Camptonville branch of the Marysville Union High School, Marysville, Calif., retired in June.

Deaths

DR. ETHELBERT DUDLEY WARFIELD, who retired June 9 as president of Wilson College, Chambersburg, Pa., died after an illness of two weeks. Doctor Warfield was the oldest college president in the United States in point of service when he retired from his post at Wilson.

DR. CHARLES O. GRAY, president emeritus of Tusculum College, Greenville, Tenn., died at the age of 69 years. He retired as president of the institution in 1931.

DR. CHARLES W. LYON, retired associate superintendent of schools of New York City, died at Frewsburg, N. Y., on his way home from California. Doctor Lyon was in charge of the medical division and later of appointments of teachers during the nine years of his associate superintendency.

WILLIAM E. PELL, superintendent of schools at Troy, N. C., was found dead in the school gymnasium from a heart attack. Mr. Pell, who was forty years old, had been superintendent of Troy schools for seven years.

OLIVER W. LOWMASTER, headmaster of the Grosse Pointe Country Day School, Grosse Pointe, Mich., and an ensign in the Naval Reserve, was killed on July 16 near Murfreesboro, Tenn., while returning to his home from a cross-country training flight to the naval air station at Pensacola, Fla. The plane crashed during a severe thunderstorm. Mr. Lowmaster was 31 years of age.

Resignations

E. B. Norby, who was reelected this spring to serve his eighth year as superintendent of schools at Midland, S. D., has announced his resignation.

C. E. HUMPHREY, for the last eight years superintendent of schools at Grin-

nell, Iowa, has announced his resignation.

L. G. HILLIARD, principal of Livingston High School for two years, and two months ago elected superintendent of schools at Livingston, Tex., has resigned recently from his new position.

H. E. SHIERSON, superintendent of schools at Drummond, Mont., resigned after serving in that position for five years

IRA PENN HOFFMAN, supervising principal of the Tobyhanna Township High School, Monroe County, Pennsylvania, and instructor in mathematics and guidance, has announced his resignation.

Among the Colleges

DR. STEWART G. COLE, member of the faculty at Crozer Theological Seminary, Chester, Pa., has been appointed president of Kalamazoo College, Kalamazoo, Mich. Doctor Cole is the author of several volumes and he reviews books for the *Christian Century*.

The Rev. Thomas I. O'Malley, for the last eight years dean of Loyola College, Baltimore, has been made dean of St. Peter's College, Jersey City, N. J. Father O'Malley succeeds the Rev. ROBERT I. GANNON.

DEAN PAUL C. PACKER of the College of Education, University of Iowa, is spending six months abroad studying school systems of England and the Continent, particularly the organization and administration of fine arts in public school programs.

State Departments

WILBUR R. LECRON, formerly principal of the Collegiate Institute at York, Pa., has been appointed senior secondary educational adviser for Pennsylvania.

ALFRED R. MACK has been appointed supervisor of the state division of secondary education of Massachusetts to succeed Jerome Burtt, who resigned recently to become superintendent of schools at Fitchburg, Mass.

DR. FREDERICK L. PATRY, psychiatrist, has resigned from the State Education Department, University of the State of New York, to engage in private practice in psychiatry and child guidance in Albany.

DR. AVERY W. SKINNER, director of the examinations and inspections division of the State Education Department of New York, has retired after forty-four years of service. He has been connected with the department since 1909 and head of the division since 1920.

Dr. Ralph Woods, associate professor of agricultural education, University of Kentucky, has been appointed director of vocational education for the State Department of Education.

A Great Conservator of Human Values

in the American Classroom



THE POSTURALLY CORRECT AMERICAN UNIVERSAL BETTER-SIGHT DESK

ACCEPTED BY THE COUNCIL ON PHYSICAL
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Incorrect postural and visual working conditions protracted through long hours and years of school life tend to make poor posture habitual and its effects chronic.

Faulty classroom equipment is believed to be a contributing factor in a wide range of physical disorders and particularly in generally lowered energy, decreased visual efficiency, and in mental retardation.

Correct postural and visual working conditions made natural and comfortable by the American Universal Better-Sight Desk, go far to protect the child from eyestrain and the postural evils incident to school work . . . thereby contributing to vigorous physical and mental development and minimizing many of the needless wastes of human values.

Classroom posture posters and interesting pamphlets relating to healthful posture and eye-protection are available for teachers' use. Address Dept. N S.8.

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Makers of Dependable Seating for Schools, Churches and Public Auditoriums

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DISTRIBUTING BRANCHES IN ALL TRADE AREAS

No More "BACK-TALK" From the Trolley Out in the Street

Once this classroom was as noisy a place as ever frayed a teacher's nerves—or destroyed a student's concentration. Now that's all changed—thanks to Nu-Wood on the walls and ceilings! For Nu-Wood absorbs and quiets noises from the outside . . . stops unpleasant reverberations and echoes within the room itself . . . makes the speaking voice audible to every hearer.

Nu-Wood, however, is far more than just a noise-quieting material. It is beautiful decoration, available in a variety of colors and forms. It has high insulating value, too, making schoolrooms cool in summer and easier to heat in winter.

You can put Nu-Wood right over the oldwall and ceiling surfaces—the work is quickly and easily done. Use Nu-Wood for classrooms, corridors, offices, schools, cafeterias and auditoriums. No other material of its kind gives you so much for your money! Mail the coupon for complete information.





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I want to know more about Nu - Wood. Please send me, without obligation on my part, information and illustrations.

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NOTES FOR BUYERS · · ·

No Bed of Roses

Here's a pretty how-do-you-do: a manufacturer has set out to make the going tough rather than easy.

The Bay West Paper Company, Green Bay, Wis., is marketing a new paper towel and cabinet that discourages the user from extracting more than one towel. With Mosine Turn-Towls the school pupil, for example, must first push a lever on one side of the cabinet, then turn a crank on the other side until it stops and, finally, tear off the towel against a cutter edge.

The device is based on tests which show that making it harder to obtain a towel cuts towel consumption. Agreed.

In Name Only

It answers to the name of blackboard but is made of green glass. Some there be who contend that this glass is not only superior to a black board but to a slate board or a composition board. One of these is Miss Leslie Leland, principal of the Maumee Valley Country Day School near Toledo, where the Libbey-Owens-Ford Glass Company, Nicholas Building, Toledo, has installed a glass board. It is green and the pupils write on it with yellow chalk—O, the flowers that bloom in the spring, tra la.

If green just isn't your color, these boards come also in black. Dulled so as not to reflect light, they are said to lessen eyestrain and eliminate glare and blind spots. The boast is that, with normal use, they will outlast any building.

Grand Slam

There are doors that won't shut without a slam and doors that shut with a slam, so you bang if you do and you bang if you don't. All of which brings us face to face with the door check situation.

For school vestibules and classrooms, there is something novel in door checks, if you please. If there is an administrator, teacher or custodian who won't be pleased, we surmise incorrectly. The Oscar C. Rixon Co., 4450 Carroll Avenue, Chicago, thought up this one: a door check that is concealed within the head frame. Strange that some one didn't improve on the old dust-catching door check before now.

This invisible door check is simple

enough to install, they say. No special detailing is necessary on either wood or metal doors. It has a "hold-open feature"; perhaps you can puzzle out for yourselves what its purpose is.

Pepys in Pittsburgh

Up betimes, and to Pittsburgh, a summons having overtaken me requiring my repair thither. Going with a hackney coach to the ends of the towne, I was struck very deep by the pretty girles and schooles, both finely contrived. I did myself good content to observe the manner in which two schooles are fencing their playing fields this summer. With chain link fence, and of all fences this from Kokomo, Ind., mighty noble, the fields are surrounded to great height to such good office that none can enter or depart unbidden.

In the towne of Pittsburgh these Continental fences have likewise been experimented in other schooles to the number of ten and have proved by witnesses under oath and several Tryals to be of singular virtue and effect.

Night being come and foul weather, I took leave of the schoolmen with all possible kindness. Back to the towne, my business discharged, and did indulge myself a little the more in pleasure. And so to bed.

Blood and Sand

There are scads of maintenance men about our schools to whom a floor sander is, as one might say, an unsampled bliss.

It occurs to us that certain school superintendents think to keep the peace by turning thumbs down on the whole sander business. Take the new Trimson sander as an example. One is ordered from Cleveland, 5713 Euclid Avenue. Straightway the vocational training department captures it and sets it up for bench work. There it drills, cuts, grinds, polishes and buffs; whether on wood, metal or composition material, it is all the same to a Trimson sander.

When the custodian comes around for his floor sander, the shop instructor can't spare it. In the interests of undefiled speech, let us pass over the argument, but the custodian wins. Triumphantly he carries off his tool and sands all floors. He swoops deftly around the edges and then attacks the woodwork

and the stairs. Shop teacher demands return of sander. Custodian says: "Notta chance. Gotta sand desk tops. Gotta sand table tops. Gotta sand alla chairs. Gotta sand"

So there you have it. Perhaps the solution is a couple of sanders.

Triangle

Maybe it is just that we are crazy with the heat, but right now Knowledge and Opportunity, noble as they are, seem scarcely sufficient. If they have to be attained at a summer session, we think the tuition should also cover Comfort. In fact, we would go so far as to state that if these three attributes are represented graphically by the sides of a triangle, the triangle should be equilateral.

Those very colleges and universities that have record breaking summer enrollments are likely to have record breaking heat. How about some air conditioning of classrooms, libraries and dormitories! Certainly it would not keep students away and there is a possibility that it might keep them awake.

We have no special axe to grind, and the Minneapolis-Honeywell Regulator Company hasn't either, so for that reason we are glad to call your attention to the little booklet "This Thing Called Automatic Heating and Air Conditioning." You get it by writing to Minneapolis, 2820 Fourth Avenue South.

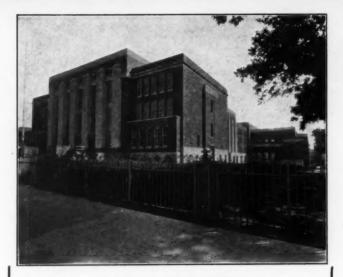
K.D.

It looks like a beautiful walnut desk in the Italian Renaissance style until you go to move it. Then you wonder what makes it so light and so rigid. The secret is that it has a steel frame.

We are talking about the new Trestlewood desk produced by Gunn of Grand Rapids. It's the only desk made, so far as we know, that has spare parts. If the desk gets battered looking by accident or hard usage, all you do is to write for a new top, or panel or leg or drawer.

The entire desk can be sent knocked down, if you like, saving shipping costs on about 65 lbs. over the ordinary crated desk. One man, using a screw driver, can assemble the desk in thirty minutes, 'tis said, although we suspect that if we ourselves did it we might take thirty-one or two minutes being somewhat less than one man when it comes to assembling objects that come K. D.

If you don't care for American walnut, you can have mahogany. If you insist upon quartered oak, you'll have to wait a while. Selfish thing that you are, you'll probably order your own desk in walnut or mahogany and make the teachers wait for the quartered oak.



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Equipped with Holtzer-Cabot Signaling and Protective Systems

By installing Holtzer-Cabot systems the architect and electrical contractor have secured for their client the most modern and unfailing electrical equipment. Holtzer-Cabot Engineers are at your service.

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Combination Padlock
No. 579. (No.
589 has
emergency
control key.)

SPECIAL SERVICE

OUR years of experience in protecting all types of locker systems is at the service of school executives. We invite you to write us your problems and require-

Combination Locker ments
Lock No. 13374 with
emergency control key. and we
will glad-

YALE NO.

ly submit detailed recommendations and estimates.

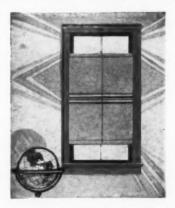
In meeting your Fall requirements, to insure the greatest security PLUS efficient operation and supervision, specify YALE LOCKER LOCKS.

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Worn Out Shades With Draper SIGHT SAVING Shades



Draper Adjustable School Room Shades keep the glare of the sun OUT, but let all of the light IN. The patented Draper pulley bracket allows easy shade removal for cleaning.

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INDIANA



- Many schools throughout the country have found that Invincible Heavy Duty Vacuum Cleaners afford much greater cleanliness at no greater expense. In fact, cleaning costs are usually lowered.
- By their unequaled ability in quickly and thoroughly removing all dust and dirt from every floor or surface without stirring up dust, INVINCIBLES go far in protecting the health of students and staff, help to maintain maximum lighting efficiency, and give full protection to the large investment in flooring, painted surfaces, decorations and equipment.
- May we give you complete information on how your cleaning dollar can bring more cleanliness and new advantages? Write today. There is no obligation.

INVINCIBLE VACUUM CLEANER MFG.CO.

NCREASED

CAPACITY

SOME schools will have to supply more lockers to meet this Fall's requirements. Others can solve the problem with different types of lock-

ers. Call in the Lyon representative near you. Let him point out changes that can be made to accommodate more pupils without taking up more space.

The complete Lyon Locker line includes 11 standard types. A

The complete Lyon Locker line includes 11 standard types. A change from one type to another can often double, treble or even further increase the number of individual lockers in the same floor space. If not, the Lyon representative will suggest other space arrangements and explain the advanced construction which has won leadership for Lyon Lockers.



Lyon Gym Locker. Six pupils use this one unit. Attendants' services not required.

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INDIVIDUALIZING EDUCATION BY MEANS OF APPLIED PERSONNEL PROCEDURES. By J. E. Walters. New York: John Wiley & Sons, Inc., 1935. Pp. xvi+278. \$2.50.

Valuable material in the field of student guidance brought together in readable form by an author who is writing about his nearest professional interest. While emphasizing primarily the college and secondary school, there is much of value to other phases. Not so deeply grounded in all of the aspects of child growth as it might be, but distinctly worth while as evidences of good current practice.

THE COURTS AND PUBLIC-SCHOOL PROPERTY. By Harold H. Punke. Chicago: The University of Chicago Press, 1936. Pp. xvi+313. Lithoprinted. \$3.

Invaluable reference book for boards of education and superintendents of schools with respect to the important and involved problem of the legal aspects of acquisition of property by school districts. Principles are carefully treated and case citations are presented illustrating each aspect.

MINIMUM ESSENTIALS OF STATISTICS (AS APPLIED TO EDU-CATION AND PSYCHOLOGY). By Dennis H. Cooke. New York: The Macmillan Company, 1936. Pp. xviii+271. \$2.75.

Students in education and psychology will find here a new text in statistics that is the terminal product of some years of experimental use with college classes. It is also simple enough that field workers can use it to solve their statistical needs. The Fourth Yearbook of School Law (1936). Edited by M. M. Chambers. Washington, D. C.: Published by the Author (744 Jackson Place), 1936. Pp. 154. \$1. (Paper.) Fourth appearance of a publication constantly growing in value and importance to libraries and to administrators. The 1936 edition has, in addition to its usual summary report of higher court decisions in school law, a supplement by Dr. Wilford L. Coffey on "How to Find School Law."

EDUCATION AND ORGANIZED INTERESTS IN AMERICA. By Bruce Raup. New York: G. P. Putnam's Sons, 1936. Pp. vi+238. \$2.50.

Survey of the numerous activities of interest-groups to force their particular point of view upon the schools and to produce their own propaganda for the indoctrination of the immature. Industrial and religious groups, conservator societies and the War Department, the American Chamber of Commerce and the utilities are presented in the light of their published activities. Should be read carefully by all teachers. The Teaching of Body Mechanics in Elementary and Secondary Schools. By Ivalclare Sprow Howland. New York: A. S. Barnes and Company, Inc., 1936. Pp. xii+203. \$2.

This book is divided into four main sections, the last two parts of which are the most unusual and perhaps the most useful for the teacher starting out on a teaching program of body mechanics. These parts approach the subject quite differently from any other book on the subject, dealing with projects that can be used in such a program and with suggestions for obtaining useful material.

Down to Earth. An Introduction to Geology. By Carey Croneis and William C. Krumbein. With illustrations by Chichi Lasley. Chicago: The University of Chicago Press, 1936. Pp. xviii+501. \$3.75.

Another of those fascinating University of Chicago 'exts, this time in the physical sciences. We've never read a geology as intriguing and interest-holding as this new work. The profuse illustrations enhance the well written narrative and stimulate interest. Recommended strongly for the thirteenth and fourteenth years.

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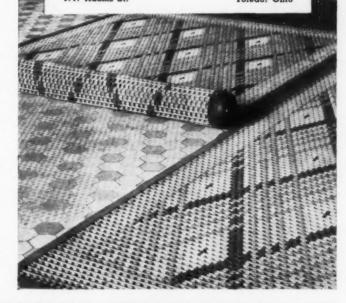
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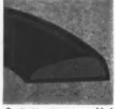
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NATIONAL ECONOMIC SECURITY. By Arthur B. Adams. Norman: University of Oklahoma Press, 1936. Pp. 327. \$2.50.

An economist with a long record in public service scans the horizon and tells how the valuable elements in the capitalistic system may be retained and greater benefits accrue to the masses. His program for economic security is neither radical nor conservative. He follows the general American pattern already in practice for many years—progressive perimeter control over business by the national government. His plan for increasing consumer purchasing power is sound.

THE TEACHING OF LITERATURE IN THE HIGH SCHOOL. By Reed Smith. New York: American Book Company, 1935. Pp. viii+485. \$2.

A volume filled with helpful suggestions for making literature meaningful, vivid and interesting. Under the various types of literature he illuminates his theory by giving illustrations of how to teach various selections. A feature of each chapter is the well selected bibliography offering further study of the topic under consideration. The book will be especially helpful for inexperienced teachers of English but any teacher of the subject can read it with profit.

PROPERTY TAX LIMITATION LAWS. The Evidence and the Arguments for and Against Them by Twenty-Four Authorities. Revised Edition. Edited by Glen Leet and Robert M. Paige. Publication No. 36. Chicago: Public Administration Service, 1936. Pb. 92. \$0.75. (Paper cover).

Every school administrator should possess and read this report on property tax limitation laws.

Just Off the Press

FRENCH CIVILIZATION. By Edward 1. Amateau. New York: Globe Book Company, 1936. Pp. vii+63. \$0.60.

French Reading and Practice. By André Célières, Helen Célières and Edmond A. Méras. New York: Globe Book Company, 1936. Pp. viii+171. \$1.

MODERN BOOKKEEPING. By Warren L. Starkey. New York: Globe Book Company, 1936. Pp. viii+271. \$1.

ARITHMETIC FOR BUSINESS TRAINING. By Alexander Fichandler, Louis Slatkin, and Murray Melzak. New York: Globe Book Company, 1936. Pp. v+163. \$1.

GUARDING OUR HEALTH. By Nils W. Olsson. New York: Globe Book Company, 1936. Pp. ix+155. \$1.

MEN AND WOMEN AT SCHOOL. AN INTERIM REPORT ON ADULT EDUCATION. Written cooperatively by the administrative and supervisory staff representing the Board of Education of the City of New York, Department of Education of the State of New York, the Emergency Relief Bureau of the City of New York, and the Works Progress Administration of the United States. New York: Board of Education, 1936. Pb. 361

THE CHILD OF THE TEXAS ONE-TEACHER SCHOOL. By Annie Webb Blanton. Study No. 17, Bureau of Research in the Social Sciences. Austin: University Publications, The University of Texas, 1936. Copies furnished free on request.

World History. The Growth of Western Civilization.

By R. Flenley and W. N. Weech. New York: E. P. Dutton
& Co. Inc., 1936. Pp. xix+757. \$3.50.

LITTLE ME. IN PICTURE AND VERSE. By Fanny Y. Cory. New York: E. P. Dutton & Co. Inc., 1936. \$1.

ELEPHANT TWINS. By Inez Hogan. New York: E. P. Dutton & Co., Inc., 1936. \$1.

THE DOLL HOUSE AT WORLD'S END. By Marjorie Knight. Illustrated by Clinton Knight. New York: E. P. Dutton & Co., Inc., 1936. \$1.50.

Webster's Collegiate Dictionary. Fifth Edition. Springfield, Mass.: G.&C. Merriam Company, 1936. 110,000 entries, 1,300 pages, 1,800 illustrations, synonyms and antonyms. Regular style for school or library use, \$4.

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Side Glances-

ONE of school life's great dissatisfactions — particularly for duller pupils and brighter administrators — is the report card. Experiments are going on in every state in an effort to evolve some form of achievement record that is just.

Aberdeen, S. D., has a graph plan of reporting pupil progress. An elementary school supervisor and an elementary school principal have joined with Supt. Charles J. Dalthorp in putting the plan down on paper. They don't claim strict originality or infallibility for the scheme, but it has endured a two-year trial period with the parents overwhelmingly in favor of its continuance. Watch for the complete description in October.

CURRICULUM re-

vision is never done. Procedures that should continue indefinitely, if courses of study are to keep alive and to be changing sources of help to the teachers for whom they are intended, are outlined in an article for October by George C. Kyte of California. Doctor Kyte's contribution considers curriculum revision entirely from the angle of in-service training for teachers.

"RIGHT and

Wrong of Radio" by R. R. Lowdermilk of Ohio State University is money in the public pocket for the principal or superintendent who is about to equip a building for radio reception. Mr. Lowdermilk tellingly presents the experiences of several school executives who would prefer that the subject of radio not be mentioned in their presence. These installations came too high or too low or else they didn't look far enough into the future. This author's advice seems sound and workable.

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ADVERTISING PAGES REMOVE CONTENT-S

HAT will next year's cafeteria model be like? Clifford Ettinger has ideas on the subject and some of them will win your applause. Mr. Ettinger, the faculty manager of the Haaren High School cafeteria, New York City, isn't talking much about equipment; he's concerned with teaching. He wonders how it is that school heads regard the lunchroom merely as a place to eat and not as a place to teach. He does not mean table manners, either: he means business and office practice, art, mathematics, household economy and the like. He suggests how this may be done in an article for the autumn.

"SCHOOL Life

With Father" is an October item directed to the private school contingent. Earle Hitch of Culver Military Academy undertook to find what the private schools have that compares with that powerful body, the parent-teacher associations of the public schools. He circularized some of the larger boys' schools, with a sampling of girls' and coeducational schools of both the town and country type. What he found about the work of fathers' associations and other types of cooperative parental relationships is of real interest.

F YOU have not been impressed with the work of the Junior Red Cross in your locality, keep an open mind on the subject for one more month. When you have read in our October issue Thomas W. Gosling's account of what some high school and grade school children have done in the way of social service activities, you will be full of admiration.

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LOOKING FORWARD

Avoid Pressure

AFTER a long summer vacation spent in work, play or advanced study teachers return to the opening of another school year supported by the best budgets since 1930. Returns from both small and large city districts throughout the country indicate that depression deficiencies, except in capital extension, have been more or less restored.

In certain states and areas within other states recovery is uneven. It will probably continue so until some effort is made toward a fundamental administrative reorganization. Certain states will continue submarginal in their support of public education until not only administrative but also revolutionary tax reform is effected. Except with respect to support for plant rehabilitation and extension, there is little immediate possibility that the federal government will add subventions for current expense.

The solution of the problem of adequate finance is definitely before the individual states. They must determine their own programs. In our essentially democratic organization of public education the degree of adequacy will finally be determined by the extent to which the teaching profession can create a supporting public opinion with respect to a recognition of value and need.

To a large extent the success of this program of interpretation of educational needs to the adult community depends upon the teaching profession. The success that the teaching profession can attain again hinges upon the effectiveness of its professional organization and the degree to which it is possible to form a closely knit, united-front teaching guild. It is extremely doubtful whether the present typical administrative type of state or national teacher associations can be ultimately effective in commanding the interest and support of the classroom teachers, who must form the backbone of any plan. It is entirely true that through the use of administrative pressure and the preaching of one-hundredpercentism, the total of last year's membership may be considerably advanced. These forced increases in membership mean nothing. If analyzed at all, they must be considered as a liability rather than an asset.

The ultimate route to effective professional organization is in the development of a program that offers definite protection to the teachers and accepts at the same time the essential professional responsibilities. It lies in the growth of a much more realistic point of view than the teachers now possess or their secretariats permit.

Teachers and administrators should study carefully and deeply their common professional problems and attempt their own reorganization on a basis that recognizes common group interests. Once such a basis for organization and action has been achieved the resulting interest should provide sufficient urge to membership so that pressure campaigns may be avoided. Until such a change can be made, current organization will be much more effective if confined to those who join voluntarily. Reasonable advertising is valid but it seems quite desirable that administrators seek definitely to avoid all semblance of pressure on teachers by direct or indirect means to join either state or national professional organizations. Let us practice a bit of the democracy we so frequently discuss. Professional affiliations should be made voluntarily.

Correspondence Courses—I

The trend toward the use of correspondence courses in secondary public education represents a movement that is apparently gaining converts among educators. It is so significant in its ultimate potentialities that careful scrutiny should be made in terms of the fundamental principles of public school administration and the continuance of free schools.

With correspondence courses per se there is no quarrel. There are definite adult areas in which this activity functions well. There are a number of public and proprietary institutions engaged in its development. With this activity and its proper orientation there is little to criticize. More power to it as another means of the dissemination of knowledge. The problems to be considered lie in an entirely different field.

Certain individuals and certain institutions have asserted that present-day small secondary schools cannot furnish an adequate program for the needs of their students, especially those on noncollege levels of preparation. This deficiency is due apparently to two major reasons: (1) finance cannot be secured and (2) because of size the schools are inadequate for the administration of enriched curriculums.

With the inadequacy of existing marginal secondary schools there can be little difference of opinion. They are obviously and woefully inadequate educationally and socially! With the assumption that inadequate finance must be considered as permanent or that essential efficiency cannot be secured through the orderly democratic process of presenting evidence of this fact to the people and thus paving the way to reorganization there is room for wide disagreement. The reasoning behind these assumptions is defeatist. It overlooks entirely the possibility of change through leadership and interpretation.

Those who believe in the permanency of current levels of adequacy instructionally, administratively and financially offer as a remedy the introduction of what are euphoniously known as "supervised correspondence courses" purchased from either public or private institutions of higher learning or from institutions better known as national correspondence schools. In several instances it is even proposed by enthusiastic exponents of the plan to have state educational departments certify certain institutions as legally capable of supplementing secondary school curriculums. In general these plans would have accredited correspondence institutions: (1) prepare the courses; (2) sell them to the public secondary school; (3) have them given under the guidance and direction of a local "supervising teacher"; (4) have the service-institution correct all papers, projects and examinations; (5) give credit for the work to the pupil, and (6) have the public institution accept this outside appraisal and automatically enter this credit on the books of the public institution. The secondary schools are to be authorized to contract with any accredited institution for this service, the duration of the contract to be at the pleasure of the public institution.

Examination of these assumptions must be made on the basis of the general principles involved. These may be stated as follows:

Public education is a function of the state.

Responsibility for providing adequate public school facilities and support is definitely the legal responsibility of the state.

The legal organization of public education on the elementary and secondary levels makes the state the legal planning and appraisal agency. The people as a whole, through their legal governmental organization, delegate to the local school district control and administration of the educational program. The local district must provide for the minimum program and may provide required opportunities beyond the minimum.

The teacher, as this legal agent may be defined by the state, is responsible for the determination of the technical curriculum, the planning of specific courses, control over the teaching of these courses, and the appraisal of such teaching for validation of the pupil's work in terms of institutional credit. The school district works instructionally through the legally authorized teacher.

If at any time or in any given area facilities for public education are inadequate in terms of the safety of the state or the needs of the children, it is the duty and responsibility of the legally qualified public school officers to make public such inadequacies so that they may be corrected by the state as the responsible agent.

Acceptance of shortcomings by permitting private individuals or voluntary institutions to participate in the removal of such shortcomings, or through shifting the fiscal burden of such inadequacies from the state, is not tenable according to tradition or legal concept.

The principle of undivided school support has been interpreted legally to mean that public moneys cannot be disbursed to nonpublic agents or agencies.

All attempts by individuals or groups to divide the public school offering between agencies outside of the legal structure of public education should be carefully appraised in terms of these fundamental principles. Action should not be taken in the all too typical manner of the profession upon the assumption that the "movement will do good," "it is much cheaper," "it will cause no popular disturbance," "it is much easier" or upon open imitation of other districts. There is only one approach and that is in terms of the fundamental pattern of public education. Professional responsibility toward its public trust calls for statesmanship, not expediency and drift. Other implications of this movement will be considered in later issues.

Duplication Not Serious

There arises with monotonous regularity some member of the teaching profession to speak against duplication of effort in different state institutions of higher learning. Each appears to consider duplication bad in the particular area of his major interest. Some, however, are ready with more sweeping programs that would centralize specific efforts in specific centers. Is there a real basis for these preachments against duplication? Do they arise primarily from an unconscious or conscious acceptance of the creed of size as a criterion? Are they really an expression against something more than duplication which seldom appears on the surface?

First of all is the group of professed centralists. They would allocate specific fields of activity in education to special institutions and not permit their duplication in other state agencies. As illustration one might take the chronic case of attempting to place all home-making activities in agricultural schools while all academic preparation of teachers is to be accomplished in other centers. Advocates of specific allocation programs believe whole-heartedly in unified control of all higher educa-

tional agencies within a state so that "costly duplication" might be prevented.

Carried to its logical conclusion this point of view would mean that individuals would be forced to select training institutions in terms of rigidly defined programs of instruction, regardless of desire, cost or convenience. The principal reasons given by supporters of no duplication programs are those of economy and efficiency. Centralization of an activity will provide numbers. Numbers will permit high specialization in equipment. Numbers will permit the securing of highly skilled and competent personnel. Numbers will make the best argument for budget increases.

Against these arguments must be considered the true condition within any area. So far as we are aware size, the great American phobia, does not necessarily correlate with efficiency. Given a minimum number-unit that permits efficient use of equipment and personnel, there is no reason to assume and no proof to sustain the contention that further advances in size result in further efficiency. In fact any increments beyond the basic unit and the attainment of a second such unit tend to provide for an actual decrease in economy of operation and constancy of returns. There is no merit in mere size.

If size is not of itself the final factor in any consideration of efficiency, it should then be possible to consider against the desires of the centralists the convenience and desires of the students and the desirability of well-rounded and balanced institutions. If a state university is located in one end of a rectangular state, there is no particular reason why all students wishing certain specializations should not be permitted to secure them in a similar but assumptively inferior institution (usually the agricultural college) at the other end. It is just as essential that a wide cultural training, particularly in the fine arts, be available to agricultural and teachers' colleges as to universities, provided that fundamental demand makes an initially efficient number-unit possible. Thus, it is not serious if both university and agricultural college offer courses in engineering, forestry or landscaping.

Neither is it to be considered detrimental if state teachers' colleges offer training courses in certain areas that parallel universities. In fact, one of the greatest weaknesses of teachers' colleges has been the paucity of training offered in certain cultural areas because it was assumed to be duplication. Going one step further, there is no valid reason why each region within a state should not be served by its own regional college, regardless of name given it, provided that the fundamental demand is sufficient to sustain it. There is no more reason to center all teacher training in a single institution, just for numbers' sake, than there is to allocate specific intercurricular areas absolutely to different institutions. Neither is there any valid basis for assuming that highly specialized types of graduate work should

be centered nationally in a single institution created especially for that purpose.

Much of the argument for regional allocation, specialization and nonduplication appears to be fundamentally based on the concept of size and the fear of interinstitutional competition. Worshiping the first and subconsciously fearing the second, it is possible that many advocates of centralization have missed the real principle involved.

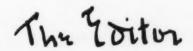
There is no harm in duplication of units or parts of units provided the fundamental demand is sufficient and provided interinstitutional competition is not the reason for the development. Duplication without competition is a sensible basic policy. Extravagant expression of institutional ego should be permanently condemned while rational duplication to meet regional demands should be intelligently encouraged.

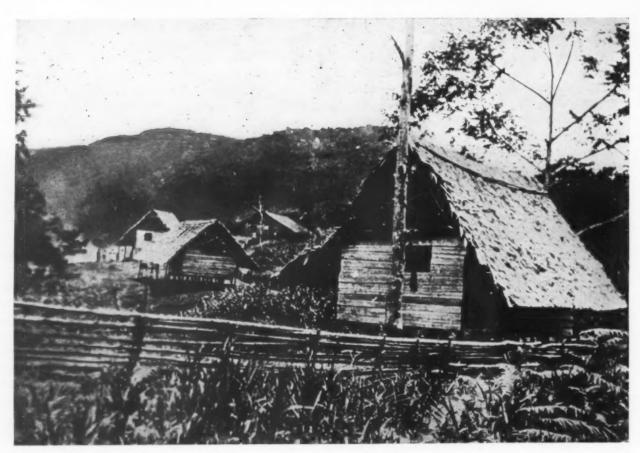
Restrictions on Teaching

The new edition of "The Gag on Teaching," published under the auspices of the American Civil Liberties Union, is now available to administrators, teachers and laymen alike for the small sum of ten cents. It offers a summary of legislative restrictions on freedom of teaching; inroads on freedom by voluntary interest-groups; alarming restrictions on private schools; the gag on colleges, and a presentation of the principles of academic freedom. It contains a wealth of information not easily or readily available to the profession except through difficult individual research. Its board of editors includes representatives of all shades of educational opinion from extreme liberalism to ultraconservatism. All members of the profession should be definitely familiar with its contents, although there may be considerable disagreement with respect to details.

Accident Prevention

With the opening of school and changes toward shorter days and with the increasing cloudiness that may always be expected during the fall months, the attention of all principals and superintendents is respectfully called to the frightful loss of child life through needless accidents. Instruction in safety should start with the first day of school and continue throughout the year. Every reasonable instructional device should be used to instill into the children regard for the hazards encountered going to and from school. The summer months undoubtedly breed carelessness, particularly on the part of those who may have been living in sections away from the dangers of automobile traffic. Don't wait with safety instruction until the accident list mounts up. Start the opening day.





From pupil in Papua







Lessons by Post

By JOHN FRANCIS CRAMER

HE problem of organizing and supporting an educational program in sparsely settled and isolated areas is as pressing in other parts of the world as in portions of the United States. Some interesting possibilities may be suggested to us by solutions attempted in other lands. The method of educating elementary pupils by correspondence has never been tried in the United

States, but it has been employed with great success in other countries.

In most of our states the situation is complicated by organization into many small school districts. When the quality of educational offerings depends upon the taxable wealth within the district boundaries, rural schools and low standards are frequent team mates. With some notable exceptions we have been accus-

Canada, as well as Australia, educates many rural children by mail. Doris, pictured here, is a fourth grader in northern Alberta. She has never entered or even seen a school.

tomed to consider the one-teacher school as an expensive and inefficient unit. It is recognized that the elimination of this condition depends upon the solution of the problems of fewer and larger units of organization and a broader base for financial support.

In the Australian states and New Zealand, centralization is the rule and the state is the unit. In these countries rural one-teacher schools are claimed to be equal in efficiency and quality of instruction to those in the cities. In these systems the state has broad powers and is able to attack the problem of the rural child with some degree of success. In the Canadian provinces the same starting point is used from which to attack the problem, a greater participation on the part of the state government.

The basis of the plan adopted is this: when there are too few children to form an efficient school group, or when the local community is too poor to support an adequate school, the children are educated by mail from a state correspondence school. This method of instruction was first attempted in 1918 in the Australian state of Victoria, and from a small beginning it has grown until it is probable that this year nearly 40,000 pupils in a dozen different countries are receiving their lessons from the postman.

The organization of a statewide correspondence system is relatively easy in countries like Australia, where the state education department is responsible for the administration and supervision of the schools of the entire state. In some of the Canadian provinces, which are divided into small districts as are the neighboring American states, central correspondence schools have been established to serve the entire province. Some of these, as in British Columbia, have an efficient system beginning at the first grade and continuing through high school; others have no secondary school work. Practically every Canadian province except Quebec makes some provision for correspondence teaching.

Usually lessons are mimeographed, but sometimes they are attractively printed with many illustrations. A set of lesson sheets and text material, covering one or two weeks' work, is sent to the pupil, and when this is returned to the school it is carefully corrected and sent back to the pupil. The next week's lessons have in the meantime been received.

Personal Letters With Lessons

Every teacher endeavors to arouse a friendly, personal feeling between himself and each pupil. Letters are sent with nearly every lesson; letters from the pupils are carefully answered, and the pupil's interest is aroused and cultivated. The method is in every sense of the word individualized instruction, and the work is easily adapted to the needs of each pupil.

In every country which has adopted this system the results have been so gratifying that it has replaced traveling teachers, boarding subsidies and transportation allowances, subsidies paid to teachers hired by parents, and other methods formerly employed to educate children who could not reach the regularly organized public schools. In most of these countries there are state external examinations, usually at the end of the sixth grade and in high school. Correspondence pupils who sit for these examinations usually rank higher than the average of all children taking them, so that the quality of work is considered satisfactory.

In general, parents are well pleased with the opportunities offered. The

Anglo-Saxon parent wants his child to have an education, and whether he is a pioneer in the Australian bush, on the South African veldt, in the Canadian Northwest, or a missionary in Papua or a lighthouse keeper on the New Zealand coast he feels happy to see his children receive a satisfactory education, even in his isolated home. Every correspondence school has big files of letters from grateful parents and ex-pupils.

While the one-teacher school in American rural districts is most expensive, the correspondence method is extremely economical. In 1929-1930 there were many one-pupil schools in the United States in which the cost per pupil exceeded \$1,000 per year. Even now some schools cost the taxpayers annually from \$300 to \$600 per pupil. In the six Australian states, New Zealand, Southern Rhodesia and seven Canadian provinces the average cost per correspondent pupil in 1934 was less than 50 per cent of the cost of the average pupil in the public schools.

Educational costs are much lower for an equivalent standard of education in a centralized system of education. Per pupil costs in the Australian states ranged from \$40 to \$67 in 1934, while costs per pupil in the six Australian correspondence schools varied between \$22 and \$26 per year.

Visit to a Correspondence School

Americans might be surprised at the extent of the primary correspondence system and the number of pupils educated by this means. Since 1918 more than 60,000 pupils have had most or all of their schooling by mail in Australia. In Canada, South Africa, Australia and New Zealand there were 19,655 elementary pupils enrolled for correspondence study in 1934. In the same year there were 13,700 secondary pupils on the rolls. In 1933 Canada had 150 teachers engaged in instructing 8,926 elementary pupils by mail. More than 500 teachers are employed today in state elementary correspondence schools.

For an example let us visit one school. The Primary Correspondence

School of New South Wales at Sydney occupies a large building which was formerly the Teachers' College. Here is one of the largest elementary schools in the world, with 149 teachers and more than 6,000 pupils. Each grade is in a separate room with a supervisor in charge. In the duplicator room an electric mimeograph turns out thousands of copies of lesson sheets and messages every day. In the storage and leaflet room three men are kept busy with 1,000 different printed and mimeographed lesson and assignment leaflets. Several men in the mailing room handle the tons of mail that come and go every day.

The headmaster of the school, W. Finigan, is a pleasant, quiet man who has built up this efficient organization from a small beginning. He may get more than 100 personal letters in a day, but each one of these receives some personal attention.

Radio Lessons Help Diction

From the headmaster's room goes out a weekly radio broadcast to the thousands of pupils scattered all over a great state. Geography, history, civics, current events, nature study, all of these are included in the broadcast, and always a reading lesson. Since the pupils are far from other boys and girls and from their teachers, they miss oral instruction. They may seldom, if ever, hear correct speech, so there is always a short discussion of pronunciation, phonics and diction. Some teacher with a pleasant voice and clear and accurate speech reads a lesson from the current number of the school paper or from the reader. Often the reader will be Mr. Finigan himself, for he has an excellent voice for the purpose. Thus all the children everywhere hear a selection read well, as they follow the reading in their own books. One of the deficiencies of the correspondence method, the lack of spoken instruction, is partially overcome in this way.

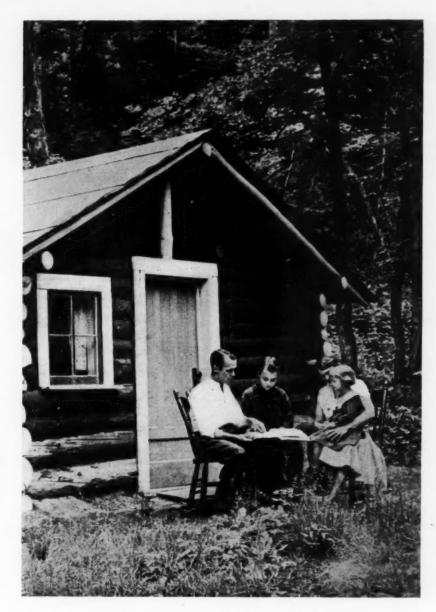
Composition books are provided for each child, and three of these are in circulation at all times; one at home in which the pupil is working, one at school for correction and one in the mail. Each lesson consists of a mimeographed paper, giving all the news of the school and pupils and quoting especially good work; the week's assignment in printed leaflets, and sometimes a library book or the monthly school magazine. The latter is published by the state department and is sent to every school in the state. It is issued in several graded editions and consists of supplementary reading materials, current topics and nature study work.

Every elementary child must have a supervisor, either a parent or some other person who will take charge of the home work. Sometimes, in a wealthy home on an isolated sheep station, it is a governess who is the supervisor, a highly educated young woman who does nothing else but direct the children's study. Sometimes, in a galvanized iron shack in the bush, it is a tired, hard-working mother who takes a little time from her many duties to oversee the education of her boys and girls. Sometimes it is a farm hand or a fence rider on a sheep or cattle station, or one of the keepers in a lonely lighthouse who helps and directs the young pupils who live near.

Some children have beautifully furnished schoolrooms in their homes; some have no table to write on but work their assignments on a box in the shade of a truck. With itinerant families it is often difficult to keep in touch by mail. In spite of difficulties and handicaps, the work is usually well done and the results quite uniformly good.

Each pupil is an individual to the teacher, even though they may never see each other. On the teacher's desk one may see an album of pictures and letters from individual pupils, and these teachers know more about the boys and girls they teach than some teachers do about children who actually sit in front of them every day. The friendly, interested tone of letters sent between teacher and pupil is a revelation of the spirit of the school.

Sometimes these children do see



The whole family helps this boy with his lessons, which the postman delivers from the Ontario Government Correspondence School.

their teachers. If a correspondence pupil goes to the capital city, one of the first places he plans to visit is the correspondence school to meet his teacher. The teachers make a great deal of these visits and help to make the trip to the city interesting and instructive. Several of the state correspondence schools have special pins so that correspondence pupils can recognize each other when they meet. On rare visits to larger towns shy country boys and girls find these pins are unexpected introductions to fellow pupils of their own ages.

Correspondence pupils miss much of the socializing influence of the schoolroom, although individual instruction is efficient in the fundamental subjects. Some attempts have been made to make up for this lack in the educational program of the correspondence pupil. New Zealand is arranging interesting excursions to the capital as a reward for good work. Radio lessons add to the lessons by mail some touch of spoken teaching. Whenever a child comes to the city, even for a week, the school attempts to place him in a public school for that time, so that he may play and work with other children.

One may sit in the office of the headmaster and watch the unfolding

of many little dramas. Here is an eight-year-old girl who is moving to New Guinea and from now on her lessons will go to Rabaul by regular mail boats and on to her home by occasional native boats.

Here is a letter from a boy who has an interesting history. His father had to quit school at the age of nine, and his mother was illiterate. The boy had begun correspondence study when a fence rider on the station who could read had offered to supervise the work. After two or three years a labored letter was received from the father, saying that the boy would have to drop his school work because the other man had left the station and there was no one left who could help him. The teacher wrote back, urging the father and mother to take the work with the boy and so keep the boy at his studies. They decided to do so, and letters retained in the office show the progress made over a

period of several years, not only by the boy but by both parents.

This boy rides fifteen miles across country to get his lessons. I looked at one of his lesson booklets. It was not very good but there were several items which had received some praise. The teacher explained this to me, and at the same time revealed his philosophy: "I never let a corrected lesson go back to him without some commendation. I wouldn't have that boy ride fifteen miles to get his lessons and find nothing but carping criticisms in his corrected work. I must find something that is good and urge him to bring the rest up to that standard. I want him always to take something home to his mother that she can feel proud of."

Here is real understanding of the needs of the individual pupil, isolated and handicapped, but securing an education from a sympathetic teacher who has never seen him. substitute teacher report; manual arts; cafeteria report; music, banquets, plays; grade percentages—honor roll; graduates.

For several years I have presented important material to the board in typewritten form at each monthly meeting. Flexible binders are furnished each member and the pages of the reports numbered and punched to fit, so that at the end of the year each member has a consecutively numbered report covering the entire year's work. In order to ensure the success of these monthly reports, a short time should be taken at each meeting for a discussion and explanation of important material. The annual report then becomes a summary of the material that has proved of value throughout the year.

No superintendent should think of operating a school without checking on the results of his efforts any more so than a business should continue to operate from year to year without knowing whether it was operating at a profit or a loss. While primarily the report is made for the board of education, it should not fail to have educational value for the superintendent himself.

As soon as the board of education has approved and accepted the report, additional copies are made for interested patrons and community leaders. Copies distributed to the public should always carry an acceptance and approval statement from the board of education. If the report includes a comparative study of school costs with other schools of similar size, little difficulty is experienced in getting support when additional levies or bond issues are presented.

The annual report should also be considered as a summary of a school organization whose main interests are the creation of conditions whereby each pupil may grow in knowledge, ability, character and health. These provisions can be attained only when the confidence of the patrons of the community is realized and maintained. The annual report, when carefully prepared, will go a long way toward obtaining that confidence.

Small Schools Need Them, Too

By HERBERT L. FORD

Superintendents in large cities present annual reports to their boards of education, but few superintendents of smaller cities have done so probably because they believe that in a small community board members are intimately acquainted with the details and policies of the school system.

Experience over a number of years has convinced me that there is need for an annual report in small cities and even in villages.

Such a report has a threefold value: (1) to serve as a means of evaluating the year's work, as well as to present the plans for the coming year; (2) to give to board members, in summary, the information they should have concerning the school in order to perform their obligations to the community intelligently; (3) to serve the board as a useful medium of publicity in keeping the community informed about the schools.

Beginning with a twenty-five-page typewritten report in 1929, my annual report has been enlarged every year until the 1936 report comprises an eighty-four-page mimeographed bulletin. This deals with these problems: review of year's work; board of education, faculty; activity point schedule; calendar of events, 1936-1937; bank deposits; estimated revenue, 1936-1937; comparative study of school costs; subject costs; audit of school funds; attendance data; teachers' home visitation record; health department report; testing program results; commencement; junior-senior prom; textbook recommendations; new salary schedules; floor plans of new addition; textbook report; receipts from state funds; estimated budget and expenditure graph; per pupil costs-high school and grades; insurance for school buildings; enrollment data; promotions and failures;

Where Propaganda Begins

By I. L. KANDEL

HE real issue in education today is the race between propaganda and education. In this issue lies the fundamental difference between the conception of education which prevails in those states that have passed through revolutions, and education as it should be understood in a democracy such as ours. In the former no distinction is made between propaganda and education, and the function of the schools is to mold all individuals to the pattern determined by the particular ideology that has been adopted, to make all individuals think alike, to eliminate all those ideals which are the fundamental bases of democracies - freedom of worship, freedom of association, and freedom of expression in word or print.

In the totalitarian states — and no distinction need be made on this point between Fascism, Nazism and Communism - all vestiges of academic freedom have been destroyed even in those institutions which were reserved for its perpetuation, the universities. Each of the totalitarian states has its own definition of freedom as that condition in which the individual has lost his identity in the whole, a condition that has its outward manifestation in the wearing of a mono-colored shirt, the shroud of individuality. Japan has followed the logic of this situation by creating in its department of education a bureau of thought supervision.

All totalitarian nations have been infected by a common disease, the disease of orthodoxy. If some tend to be impressed by the exhibitions of national solidarity which are arranged for domestic indoctrination and for foreign consumption, they must be reminded that these are

manifestations not of individuals in their normal conditions of mind, but either of a type of coercion that the world has never witnessed before or of abnormal hysteria and fanaticism engendered by the subtlest techniques of propaganda. Only in this way can a nation deliver all its votes to one man or to one cause without ques-These revolutionary societies claim that they have given their subjects something to die for; from the liberal or democratic point of view they have been deprived of most of those ideals for which it is worth living.

Education as propaganda is the instrument used by the totalitarian state to mold all individuals to the same pattern. There is no break in gauge between school and society, and while the school has become an agency for the strictest form of indoctrination, new agencies have been invented for the regimentation of youth, far more powerful and far more despotic than the school has ever been. Youth movements take hold of the boy after school hours and control his action and thought for the rest of the day. Education so defined and so conceived appeals not to intelligence but to the emotions and uses all the arts of mob psychology to secure the desired ends.

It is against a background such as this that American educators must consider the present situation. The history of organized school systems is the history of a struggle between groups for the possession of the mind of the child. First the church insisted upon the right to educate the child; then, with the slow emergence of the nation-state, the state sought to wrest this right from the church but succeeded only in entering upon a

Where does education end and propaganda begin? That is the problem of present day educationists, striving to recognize the center path, harrassed as they are by Lefts and Rights

partnership. The distinctive feature of education in this country has been the acceptance for nearly a century of the ideal that education is the concern of the whole public and that it should not minister to any one group in it.

Today we are confronted with the danger of departing from this ideal and surrendering to the demands of groups that would impose upon the school their own conception of its functions. On the Right there are groups which, fearing the menace of subversive influences in the schools. would seek to impose their own formulas of patriotism and loyalty upon them. On the Left there are groups which, while attacking all other groups as pressure groups, fail to recognize that they too are guilty of the same methods and seek to seize hold of the school to build a new social order.

Both groups are affected by the same influences, the changing conditions in which society finds itself today, but with this difference that, while the one seeks to save what it regards as established truths, the other denies their existence and aims to found a new social order. Both are equally guilty of ignoring the American tradition, that the schools belong to the public as a whole. They

are equally guilty of ignoring another axiom which runs through the entire history of education, an axiom crystallized in the formula: As is the state, so is the school.

The American tradition that the school belongs to the public as a whole has asserted itself before and may do so again. When the different religious denominations fought to secure public funds for the maintenance of their own schools, the public decided to adopt secular schools and to leave the problem of religious instruction to the denominations themselves. There is a real danger in the present situation, if political groups seek to impose their own patterns upon the schools, that the same result may be achieved and the schools be reduced to a colorless brand of education, at a time when more than ever one of the most important functions of education is to develop political enlight-

Society has established and continues to maintain schools in order to produce a common social understanding, a common universe of discourse, for without common objects of social allegiance society can neither exist nor perpetuate itself. This aim is common to the totalitarian as well as to the democratic forms of society; the methods of attaining it differ, however. The totalitarian state stops with indoctrination of the common social understanding. Democratic societies go beyond this and seek to develop on the foundation of common interests and lovalties men and women equipped with that knowledge and understanding that will enable them to think clearly and to exercise their powers of judgment.

Pressure From Orthodox Group

Confronted with changing conditions, the school is beset by two groups. The first insists on the traditional aim as the whole end of education. They would, through control of the curriculum, through censorship of textbooks, through interference in professional matters, control the work of the school in the interests of their own conception of social and

national orthodoxy. Such a doctrine is opposed both to democratic principles and to the development of an effective profession of teaching. It has as much justification as would any attempt by the lay public to impose its own standards on the practice of medicine, law, engineering or any other of the liberal professions. They start with the assumption that all members of the teaching profession are disloyal or that all teachers are of the same political color.

If professional freedom means anything, it means that the members of a profession can only carry out their functions in the light of principles honestly, intelligently and scientifically derived. The merest tyro in the profession of education learns as the first principle of education that it is a social process and derives its aims and purposes from the group culture which it serves. This implies that professional freedom, like any other freedom, has neither meaning nor significance without a sense of responsibility. To deprive teachers of their freedom as members of a responsible profession would be to reduce them to automatons engaged in producing other automatons instead of citizens of intelligence.

Pressure From Partisan Group

The second group is as guilty as the first of violating the principles of liberalism in education. Behind the screen of a demand for academic freedom and tenure for teachers there can be detected a confusion between education and propaganda. Unlike the liberal who does not claim to be omniscient, this group confronted with the strains and tensions of modern society sees in every opposition a pressure group and has its own plans, which are never clearly defined, for correcting all the evils of the old social order. This group would steer the schools and education in a particular direction, which has not yet become a part of the social culture in which the schools have their being and from which they derive their meanings.

If the one group would reduce

teachers to automatons, the other group would turn them into advocates and propagandists, which would equally be the negation of the proper function of education. Discarding everything that has been as obsolete and worthless, this group surrenders to the lure of new social orders or preparation for the unknown future. Pleading for academic freedom, the group ignores all reference to that responsibility which must accompany such freedom. Daring teachers to build a new social order, it urges them to ally themselves with a section of society, forgetting again the fact that teachers and schools are the agents of the whole of society.

Politics for Individual Not Group

If teachers as a body form a partisan organization, the end of that public confidence which is essential for the welfare of the school will be in sight. One of the strongest teachers' associations in France has affiliated itself with the General Confederation of Labor and has lost the confidence of the authorities and the public as well, a result that has been one factor detrimental to the progress of education. The English National Union of Teachers refused several years ago to ally itself with a political group and instead is politically neutral, ready to cooperate with any of the political parties in the interests of education; the result has been that the union is always consulted whenever any important educational measure is pending.

Teachers as individuals are in an entirely different position; as individuals they are citizens with the same rights to their political opinions as other citizens. In England and the Scandinavian countries they may enter Parliament and the local councils, and in the latter even retain their positions in the schools. To expect that teachers should refrain as individuals from politics would merely give reality to the gibe that they constitute a third estate.

The menace of social change to education in this situation is great whether it comes from the Right or from the Left; it would mean the seizure of the schools by a group and it would convert education into propaganda.

There is a place for indoctrination in the American schools, today more than ever. The schools may well assume the duty of indoctrinating the one faith which all Americans profess to accept: faith in the doctrines of democracy—the right of the individual to express his own opinions freely; tolerance for the beliefs of others, and willingness to accept the methods of argument and discussion as the bases for social change.

Freedom to Discuss Issues

These doctrines are inherent in the existence of American democracy, but, although they are accepted implicitly, little is done in education to perpetuate an abiding faith in them. Social ideals do not perpetuate themselves; each generation must be taught them anew. American education will fail if it merely takes them for granted without developing a passion for them as the moral equivalent in a democracy of the ideologies and cults of the totalitarian states.

It will be objected that this is an argument for the perpetuation of the status quo; today we are living in an era of change and education change with it. The answer is, of course, that the ideals which have been mentioned - freedom of opinion, freedom of speech, tolerance for the opinions of others, and progress by discussion and argument - are ideals which are the best and the only guarantees against a static order of society. Because they offer such guarantees they have been eliminated from those societies which claim to have created a social order to last for the next thousand years, a social order based on the idea that a Hitler is the law and will of his people, or that a Mussolini is always right.

An educational policy based on the democratic social ideals described would, it is further argued, mean that the doors of the school would be thrown open to the discussion of concroversial issues. One might well ask

what the alternatives would be. On the one hand, in a period of change the schools would be guilty of turning pupils out into the world ignorant of the problems that will confront them; on the other, the schools would become agencies of propaganda. There is, in fact, no choice but to bring those elements of conflict into the classroom.

To adopt an ostrich-like attitude and ignore the existence of such issues, to deny the right to mention even the existence of Communism, is to follow a practice that educators have given up, that of ignoring the existence of sex. Despite the school, pupils obtained information about sex but of an extremely undesirable To prohibit teaching about Communism in the schools on the assumption that "teaching is advocating" is to confuse education with propaganda, but it has far more dangerous implications for American democracy. It would mean, if logically carried to its conclusion, the suppression of a free press and of freedom of opinion; it would lead to the creation of "bureaus for thought supervision"; it would result in the arrest of anyone suspected of "harboring dangerous thoughts."

Free and Enlightened Teachers

In a democracy, then, the only acceptable aim is to develop the knowledge and understanding that are the bases of enlightened citizens. To instill ready-made ideas on controversial issues is to adopt the methods of the totalitarian states and to confuse education and propaganda.

The acquisition of knowledge, facts and information is not the sole end of education; such acquisition must be made the vehicle for training in scientific methods of thinking, and for cultivating free and disciplined minds. As contrasted with the pressure upon the school to indoctrinate the Right or the Left points of view, the essence of education is not to close the minds of the pupils, for in a changing society no one can have a final answer to the issues involved, but to place the pupils in the position

where they will appreciate the urgent necessity of acquiring accurate knowledge, of discriminating between facts and prejudices, of weighing, evaluating and judging, and reaching conclusions warranted by the information secured up to that point. If this end is to be achieved, if the aim of education is to develop free and enlightened citizens, then the teachers who are to be entrusted with carrying out this aim must themselves be enlightened and free. The problem, like all other problems in education, is one of teacher preparation and of the status of teachers.

The Cost of Loyalty Oaths

If American society desires to make its schools agencies of propaganda, it can do so; it can enforce this aim by imposing loyalty oaths which must in the end bring in their train a system of coercion and espionage, narrowly prescribed courses of study and censorship of textbooks. But it must count the cost. Such an attempt to build a Chinese wall around the schools to cut them off from the realities of life would result either in replacing teachers by automatons, the lengthened megaphones of the authorities behind them, or in a body of discontented teachers. A discontented teacher is an inefficient teacher whether the discontent is due to low salaries, insecurity of tenure or coercion in matters of professional concern.

If American society chooses, as it must if it is to be true to its own traditions, to promote education for enlightenment, it must return to its original faith, which has given to this country a system of educational opportunities for all unparalleled anywhere in the world, and which created these opportunities "to enable every man to judge for himself what will secure or endanger his freedom."

Only as the public schools become free to implement this faith, rooted in the theory of democracy and confirmed by a democratic philosophy of education, can they fulfill their responsibility to American society at a critical hour such as the present.

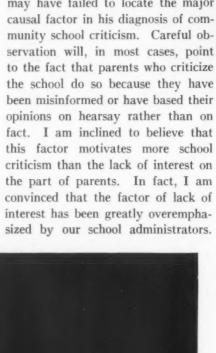
Institute for Parents

By CHARLES B. PARK

AVE you heard a school administrator lament that he would like to try this or that scheme in his school, but does not dare because of the criticism from parents that would surely follow? Probably we have all been guilty of such a thought, if not of such a statement. This one factor more than any other may have retarded the progressive policies of small schools.

In many cases the assumption of the school administrator may be correct. Parent criticism of education is far from an unknown element in small communities. However, it is

highly possible that the administrator may have failed to locate the major interest has been greatly overemphasized by our school administrators.





Parents from the country brought their lunch baskets with them; coffee was served by the school department of home economics.



The lecture-discussion plan was successfully used with small groups and qualified leaders.

Public school officials in Reading, Mich., believed that a public well informed regarding the local school and its daily operations would be an asset in the school's program of evolution from old to new methods in education.

From this assumption an interesting experiment in parent education evolved. The experiment was called a Parent Institute. Its major objective was a parent educational program that would acquaint patrons with the Reading schools from the standpoint of general aims, content of subjects taught, the newer methods and techniques being practiced and interesting innovations.

This program was organized as a community-school project and a parent committee, representative of the city and rural community, cooperated in planning the institute. This committee sponsored the project and assumed the responsibility of securing membership through an extensive publicity campaign.

Final plans were simple and would prove applicable to any small or medium-sized school center. The committee decided to send the high school pupils home to care for the house and do the chores while the



parents attended the three-day institute. The school day for parents was shortened to six forty-five-minute periods starting at 9:45 a.m. and ending at 3:30 p.m., with one hour and a quarter for lunch. Country parents were encouraged to bring box lunches from home. These were supplemented with coffee made by the home economics department. Several hundred parents ate their lunches together during the institute.

A nursery was provided to care for young children when mothers attending the institute could not leave them at home. Senior girls from the Hillsdale College Nursery School offered to direct the nursery and were assisted by high school seniors.

Those intending to attend the institute signed enrollment cards and were issued membership cards.

Upon arrival at the school, parents were assigned to a definite classroom and were given a schedule that was An improvised nursery took care of small children who could not be left at home; below, school children were sent home to do the housework and chores so that parents might attend the institute.



to be followed for the day. By following the small class idea, the lecture-discussion plan was used most effectively.

The program for the three days was as follows:

1. The first day was spent on the school and how it operates. Each teacher prepared a fifteen-minute lecture on her department and passed from one class to another throughout the day. In this way the parents became familiar with each subject in the curriculum. Extracurricular activities as well as the academic subjects were covered in the day's program.

One period was utilized for a general assembly with music, and an address by Dean J. B. Edmonson of the University of Michigan, on new trends in education.

2. The second day stressed health and included lecture-discussion groups on dental hygiene, vision and communicable diseases. The assembly program on this day included an address by Dr. T. Luther Purdom, director of the bureau of appointments and occupational information, University of Michigan, on educational guidance.

3. The third day was devoted to mental hygiene and sex hygiene. Again the lecture-discussion plan was used effectively. Dr. Roy Holmes, University of Michigan sociologist, addressed the assembly on "The Community." Some interesting parent attitudes were disclosed in the discussions on this day.

The committee was fortunate in securing outstanding speakers to take part on the institute program. In addition to those mentioned there were Dr. Howard Y. McClusky, associate professor of educational psychology; Dr. E. W. Sink, Dr. Roy Holmes, and Dr. Warren Forsythe, all of the University of Michigan;

Dr. Frank Carrothers, a dentist from Hastings, Mich.; Dr.-F. E. Barrett, of the state health department, and Dr. John A. Toomey, professor of contagious diseases, Western Reserve University.

The institute was well attended throughout the three-day period with between 500 and 600 parents registered. The response was enthusiastic and every one favored the continuation of the program through a monthly educational forum.

There is little doubt as to the value of this entire experiment. The parents now possess a better picture of the school and understand its major aims and objectives.

The entire program was financed through the University of Michigan Extension Division, the Hillsdale County Health Department, the County Medical Society, the State Department of Health and Hillsdale College. Attendance was free.

Family Life as It Is Taught

By MURIEL W. BROWN

A LTHOUGH it is probable that training "on the job" will always be an important part of parent education, parental leadership in family life depends in the last analysis on personality, and personality development is a process that begins at birth and continues through life. Attitudes and insights that are fundamental to successful parenthood can be developed at every stage in a child's learning process through the use of situations and materials appropriate to each educational level as this is reached.

The opportunities for preparental training at the secondary level are particularly challenging.

The following significant experiments actually under way in a few high schools demonstrate that activity programs for family life can be successfully worked out in public school systems for young people of high school ages.

1. Coordinated courses for boys and girls in family living. In these courses the attention of the children is directed toward the study of possible objectives for family life and the relation between these objectives and the ways in which families meet their needs for food, clothing and shelter. The discussion method is used almost entirely in group meetings. Material from many subject matter fields is correlated by faculty committees. Student representation on these coordinating committees has not been reported but would add greatly to the reality of these learning situations.

2. Family projects on which parents and children work together under the guidance of teachers, who help

with technical problems of construction. A recent exhibit of such completed projects included furniture, a marionette theater, hand woven rugs, linoleum block prints, a relief map of the state showing places of historic interest and play equipment for young children.

 Discussion groups and forums in which parents, teachers and children consider problems of community interest, sharing points of view and adjusting differences of opinion.

4. Directed observation of child behavior in connection with courses in family relations and child development. A number of high schools maintain, or cooperate in the maintenance of, nursery schools or preschool play groups, which are informal laboratories for the study of child behavior.

To fail to provide within the public school curriculum for progressive family life education is to deprive children of opportunity for growth and development in an essential aspect of their life experience.

Let's Talk About Taxes

By LESLIE L. CHISM

THE current depression has emphasized the fundamental weakness of existing state and local tax plans in most or all states. The demand for tax revenue has been heavy on certain groups of taxpayers and the feeling has been expressed that the tax burden is too great. In several states the situation has resulted in the drastic curtailment of many essential governmental services.

Although the conditions causing the curtailment may pass with the passing of the depression, the effects remain. The effects of curtailment or elimination of health services and sanitary provisions, closing of parks and recreational centers, closing of schools, reducing the length of the school term, and the number of teachers, and the narrowing of the curriculum do not pass with the passing of the depression. Rather, they remain during at least the lifetime of the individual and frequently present American society with problems far more important than the immediate problem of revision of state and local tax plans.

The purpose of the following paragraphs is to analyze the meaning of state and local tax revision to one major governmental responsibility, namely, public education.

The Model Tax Plan, prepared by a group of tax experts acting as a committee of the National Tax Association in October, 1933, outlined the general principles upon which a modern system of state and local taxation should be constructed. The plan has three major parts, (1) a personal income tax levied by the state of residence, (2) a tax on tangible property

TABLE I—SOURCE OF STATE AND LOCAL TAX COLLECTIONS, IN PER CENT

Year	Property Tax	Licenses, Permits	Personal Income	Other Taxe
1922	82.71	10.17	1.56	5.50
1928	78.09	15.95	Total	5.96 ²
1932	73.69	19.44	1.60	
1922-32	77.62	15.51	Total	6.87^{2}

'The data in Table I are based on information furnished by the U. S. Bureau of the Census and the National Industrial Conference Board.

²Only the total for these two items was given in the basic data.

levied by the state of situs and (3) a business tax levied by the state in which the business is conducted. The committee has also suggested certain supplementary taxes.

A recent study² measured the ability of the forty-eight states to raise tax revenue under a system of state and local taxation based on the Model Tax Plan. The study included the eleven-year period from 1922 to 1932, inclusive. Basic data for later years are not readily available.

What are the major findings concerning tax revision that have implications for education? The answer can best be shown by first analyzing the percentage distribution of tax collections under existing tax plans as well as under the tax system based on the Model Tax Plan. Such an analysis shows what groups of tax-payers were and would have been carrying the tax load under the two conditions. Tables I and II present the foregoing information.

It was believed to be unnecessary to present data for each year. Rather, it was felt that certain years would afford an adequate basis for the present discussion.

Under existing tax plans (Table I) property was responsible for from

73.69 to 82.71 per cent of the total tax collections, depending on the year; personal income from 1.56 to 1.60 per cent; licenses and permits from 10.17 to 19.44 per cent, and other taxes 5.50 per cent.

Under a system of state and local taxation based on the Model Tax Plan (Table II) property would have been responsible for from 64.48 to 73.45 per cent of the total tax revenue, depending on the year; personal income from 6.11 to 9.79 per cent; licenses and permits from 17.15 to 20.12 per cent, and other taxes approximately 6.75 per cent. The period 1922 to 1932 showed similar variations between tax collections and available tax revenue.

It should be pointed out that the year 1932 presented a special problem. The tax base for that year (property value, personal income, business activity, etc.) decreased greatly in comparison to the more prosperous years of 1928 and 1929. However, total state and local tax collections throughout the country remained about the same in 1932 as in 1928 or 1929. Rather than increase tax rates on existing taxes to extreme heights, the states utilized revenue from so-called depression taxes.

In order to make a valid comparison between the tax collections under existing tax plans in 1932 and the

¹National Tax Association, Second Report on a Plan of a Model System of State and Local Taxation. Lancaster, Pa.: Wickersham Printing Company, 1933.

TABLE II—Source of State and Local Tax Revenue Under a System of Taxation Based on the Model Tax Plan, in Per Cent of Total

Year	Property Tax	Licenses, Permits	Personal Income	Other Taxes
1922	73.45	17.15	8.30	1.10*
1928	65.25	17.21	9.79	7.75
1932	64.48	20.12	6.11	9.39
1922-32	65.65	19.16	8.52	6.67

*Owing to the nature of available data no inheritance tax was included in this item in 1922.

system based on the Model Tax Plan, it was thought desirable first to eliminate the influence of the so-called depression taxes of 1932. According to available data perhaps this objective could be accomplished best by adding to the collections under the tax system based on the Model Tax Plan an amount equal to the tax revenue estimated from a 1 per cent retail sales tax, including a special sales tax on certain luxuries. The data in Table II for 1932 are based on the results obtained by the foregoing procedure.

Table III presents the foregoing comparison in summary form.

The data indicate that, according to sound principles of taxation, property has been responsible for an unusually large part of the total tax collections.

The heavy tax burden that is placed on property under existing tax plans is made necessary by the fact that many enjoy the protection and other benefits of government without cost to themselves, but at the expense of other taxpayers. This is another way of saying that whenever certain groups are exempt from taxation an unusually heavy load is forced upon others and the feeling is expressed frequently that the total tax load is too great for the state to bear. It is probably true that the various states would have considerable trouble raising sufficient revenue under a tax plan in which property is responsible for approximately 78 per cent of the tax collections. However, it seems rather certain that there would need to be only reasonable effort to raise sufficient tax revenue under a tax plan designed to produce the "greatest practical degree of equity, certainty,

convenience and economy" and in which property is responsible for only 65.65 per cent of the total revenue.

The data in Table III indicate that business has not been carrying its share of the tax load. In other words, business has been receiving a part of the "benefits" which government confers at the expense of other taxpayers.

According to Tables I and II, the personal income tax has yielded less than one-fifth of the tax revenue that it should yield. Tax authorities in discussing the personal income tax have stressed this point repeatedly. It seems, therefore, that a large number of residents in the various states receive "the personal benefits that government confers" without being required to discharge their direct personal obligation to support government financially.

The various "other taxes" are considerable in number and from the point of view of revenue possibilities each tax is relatively unimportant. For purposes of the present discussion they may be dismissed.

The conclusion that may be drawn from a comparison of the data in

Tables I and II are (1) that the property tax has been forced to carry an unreasonable portion of the total tax load and (2) that other forms of taxation have been escaping a large portion of their responsibility. Before attempting to discuss the implications of these findings with respect to education, it should be explained that the implications must be based upon certain considerations or conditions such as, (1) sound principles of tax administration and (2) existing provisions for education support.

The personal income tax and the business tax are not susceptible to efficient administration by local tax units. The property tax, although equally appropriate for state administration, is reasonably well adapted to local administration. The Model Tax Plan strongly emphasized this point. It seems, therefore, that the local tax revenue even under a defensible tax plan must come to a large extent from the property tax. Also, in the American states public education receives its financial support primarily from the resources of the local school district.

It is now possible to analyze further the significance of general tax revision to education. The data in Tables I, II and III indicate that the property tax could be reduced 11.97 per cent under a defensible system of state and local taxation without decreasing the total amount of state and local tax revenue.

The significance of this possible reduction becomes more apparent when the degree of decrease is calculated,

TABLE III—COMPARISON OF PERCENTAGE DISTRIBUTION OF STATE AND LOCAL TAX COLLECTIONS UNDER EXISTING TAX PLANS TO THAT UNDER A TAX SYSTEM BASED ON THE MODEL TAX PLAN¹

Year	Property	Licenses, Permits	Personal Income	Other Taxes
1	2	3	4	5
1922	9.16+	6.98—	6.74—	4.46+
1928	12.84 +	1.26—	Total	11.58
1932	9.21+	.68—	4.51—	4.12
1922-32	11.97 +	3.65—	Total	8.32—

¹A plus sign (+) indicates an overload placed on the given tax under existing tax plans as compared to conditions under the more defensible tax plan. A minus sign (—) indicates the opposite. The data in Table III are based on those in Tables I and II.

²See footnote to Table II.

that is 11.97 is 17.32 per cent of 65.65. Thus, property under a modern tax plan would be relieved of from one-fifth to one-sixth (17.32 per cent) of its present tax burden. This would equal about \$754,000,000 tax revenue per year or approximately one-half of the total current expenses for public education in America. Therefore, by considering the tax margin left to local tax units under a modern tax plan as a potential source of additional tax revenue for education, it can be seen readily that the schools would be in a much better financial position. The use of the tax margin left local tax units would neither decrease the amount of tax revenue accruing to state and local units nor increase the property tax.

It should not be understood that I assume that the complete tax margin left local districts under a modern tax plan would or should be devoted to the support of the schools. It is not necessary for purposes of the present discussion to make this assumption. The people of certain states and school districts may decide to use the total tax margin to provide better schools. Some may prefer to use none of it for that purpose. Others may use a part. The one conclusion that seems entirely defensible is that, in any event, general tax revision would lay a better foundation for the support of the public schools without decreasing the amount of tax revenue that would be available for other governmental services.

Lost: In Nashville, Three Grades

By ELISABETH OEHMIG

CHILDREN are not ready to read until they reach a mental age of six and one-half years. For many years the schools of Nashville, Tenn., had semiannual promotions. Beginners were admitted in September and in February, if they were chronologically six years old. Parents expected that every child should be ready to begin reading, and many children who were thus exposed to reading were doomed to failure. Forty per cent of all beginners failed in the first grade.

A mental age is found by giving mental tests. Many schools feel that it is essential for this to be done. We put on such a testing program for one year but were forced to abandon it on account of the expense. We then had to rely on the teacher's judgment as to where the child belonged just as soon as she had enough data to form an estimate of individual ability.

We must realize that the school should be made for the child and that the curriculum should be fitted to the child's needs and ability. If it takes some children seven, eight or nine months to do a piece of work instead of five, it is hardly fair to consider them as retarded and require them to repeat the whole term's work. It is a serious thing for children to start out in life as failures through no fault of their own.

We have tried for many years to establish living situations in which children work together on units of work of interest to all, giving them interesting things to talk about and encouraging free expression. They look at picture books and participate in games, rhythms and stories. This is followed by reading experiences on charts taken from actual life activities of the children, then preprimer, and then primer. We now have much work in the primary grades based on kindergarten techniques.

Under the old system, all children entering in September, for instance, were expected to be able to complete the same program and be promoted to high first grade in February or else they were "failed." To prevent failures, teachers were asked to allow all beginners to continue with high first, then low second and high second, regardless of whether they had finished the limits that had been set up by some centralized authority based on content or subject matter.

In September it was decided to enter all beginners at the age of five and one-half with none to enter in February unless he was able to be classified on some previous school experience or had moved into the city from other schools.

The plan of eliminating all grade lines was a natural result of the experiment. Promotions and report cards were abolished from the first through the third grade. Children now progress at their own rate through this area until they are ready to enter the fourth grade.

In one school, for instance, there were eighty beginners who registered in September, at five and one-half or older, many with no experiences that in any way fitted them for reading. They were divided between two teachers according to chronologic age. Each teacher gave them a reading readiness program. At the end of two weeks they were shifted from one group to another, on the teachers' judgment. Some of the younger ones went to the more mature group, while a few of the older ones were transferred to the slower group. The teachers continued shifting pupils until they felt grouping was complete.

After grouping children, progress is made toward a goal of reading readiness for every child. In about seven school months children of the mature group have read two preprimers, many primers and several first readers. The slow groups have, after five or six months, begun to read preprimers and some primers. Children may be regrouped in this plan any time, in any area of learning, or whenever the teachers' judgment warrants their advancement.

There has been little trouble with parents about children getting no report cards. They are urged to visit the school. After a visit and conference with the teacher, they become convinced that the plan is a good one.

Manuscript Writing

An Effective Tool for Adult Life

By WILLARD W. BEATTY

ODERN manuscript writing made its first appearance in the schools of England about 1913. Representing, as it did, a revival of the beautiful old letter forms of the medieval manuscript, its acceptance was rapid and general. Almost ten years elapsed, however, before the new form of writing made its appearance in the United States.

Manuscript writing was introduced into the Bronxville Public Schools in September, 1924, at the suggestion of Frank R. Chambers, president of the board of education, who had been impressed with the beauty and legibility of the English manuscript writing during a summer spent in Ilfracombe, Devonshire.

Our primary teaching staff was quick to realize that because of its similarity to the printed letter forms, there would be a closer correlation between reading and writing in the primary grades. Learning to read printed letters and learning to write script letters in the first and second grades have always constituted an exceedingly difficult combination for children who up until that time have

Snow on Trees

Gleaming white sheletons
Grotesquely dancing
For the bright morning sun
They dance
While the sun shares
Incredulously.
Then they become
Black trees
Dripping upon the snow.

barely noticed either writing or printing. In both forms, capitals differ from small letters. Thus the young child is forced to adapt himself to four different alphabets in a relatively short space of time.

Because manuscript writing does simplify this problem, there has been a growing use of manuscript in the primary grades throughout the United States. While the English schools that introduced the new form accepted it in many instances as a substitute for the cursive script of an older generation, many American

Typical examples of verse written and handcopied by Bronxville high school pupils.

Russia.

White midnight

Black sky and silver landscape

Pale stars

Endless snow

The wail of a wolf From distant hills

Sounding thinly on the plains.

Chill, fearful

Brilliant

White midnight!

Adventure

I never wait for lights to change
I run and trust to luck
This has been seen to be the seen to b

I like to stand squashed in between An Austin and a truck

It gives me such a sense of power Noteasy to explain
To make the little Austin spurt
The Mack truck be profane

Signatures of Scribes

Work on Ange	
Caldwell Alexander 91,93	Thory Flogg 14,15
Miriam Alexander 40,41	Marston Gibbs 83,84
7,22,23,36 Eleanor Hymar 37,54,55,90	Patty Harnbright 60,61,73,78
Peter Barr 92	Don Hamlton 90
Onn Barry 28,32,33,77	Grace Hughes 62,68
Christopher Barnekov 42,43	Juliette Ideler 34,35
Trances Bates 24,25	Ann King 74,78
Howard Berthau 88	Angelene Krall 66,67,73
Charles Brossman 52,53,70	Cynthia Lake 38,30
George Bullock 89	Daniel Leure 80
Becky Burbidge 88,78	Virginia Ruth Loftus 44,48
Joan Burian 18,19,26,27,68	Aristine Lougee 10,11
ann Caracristi 29	Battle Lynn Mª Donald 46,47
Janet Carr 64,65	Patricia Murphy 58,59
Barbara Chambers 50,51	Betty Heiley 87
Bettie Corbin 69,88	Hong Redfield 76
Martha Corbin 20, 21, 71, 72	Barbara Snew 30, 31, 78, 78
Jean Crawford 48,49	Edna Syska 79,86
Cherry Devereux 16,17	Halen Zanziq 12,23
Nancy Erokine 66,57	
	95

schools at first assumed that the use of manuscript writing should merely precede the introduction of the cursive form.

In introducing manuscript into the Bronxville schools, no attempt was made to reteach children who had already learned cursive writing. Only the classes entering first grade in September, 1924, and after, were taught the new script. We had at that time no strong convictions with regard to the period at which the teaching of cursive writing should begin. Some of the primary teachers

urged that there was no very good reason for the children ever to change over to cursive writing.

We soon learned that Mr. Chambers, still enthusiastic over his discovery of manuscript writing, had persuaded the clerks in his firm to use it in their work. While he had expected manuscript writing to eliminate some of the errors in recording names and addresses, which are the bane of every large business, he was amazed to discover that during the first year of its use there was a substantial cash saving, through a 50

Individuality crops out in manuscript writing just as it appears in cursive writing.

per cent reduction in errors from this source. Following that, all of his clerks were required to learn manuscript writing.

The requirement is now becoming general that clerks in the larger department stores of many of our cities print names and addresses. Applications for automobile licenses, legal documents and record forms of many kinds now bear the request that essential information be either printed or typed. These instances could be multiplied indefinitely. Certain professions such as architecture and engineering in which freehand lettering has long been used contribute their quota of adults who use manuscript writing continuously in their correspondence as well as professionally.

As our children grew older and still continued to use manuscript writing, some of the parents began to inquire as to when cursive writing was to be taught. Teachers and administrators to whom the clear, legible and attractive penmanship of this newer generation of children offered such striking contrast to the handwriting of the usual American school child were loath to have their pupils revert to cursive script.

Cursive writing has always been taught in our junior high school where we had found it necessary to improve the work of some pupils coming from other schools, so we simply included in the small group receiving this instruction the individuals who wished to acquire cursive writing. Quite deliberately, however, we have encouraged children who have developed a rapid, legible manuscript writing to continue its use in high school.

It is now twelve years since manuscript writing was first taught in our schools. We, therefore, have manuscript penmen scattered through the twelve grades of the elementary and high school. About half of our present senior high school pupils, who were initially taught manuscript writing in the grades, have either developed some individualized form of linking letters or have requested and received aid in changing to script. However, an increasing number each year have preferred to keep the distinctive form of manuscript writing that they have developed as a result of their earlier instruction.

Certain criticisms of manuscript writing have been raised from time to time on the part of our own parents and on the part of educators who have been watching the development of manuscript writing in our schools. The first of these criticisms is that all manuscript writing looks alike and lacks character. The second is that while it is certainly more legible, it is probably not so rapid as connected writing. The third is that a manuscript written signature may not be legal.

Last year we surveyed our accumulated evidence, in order to answer these criticisms, and in October, 1935, we devoted an issue of the Bronxville Schools Bulletin to verse written by junior and senior high school pupils and handcopied in manuscript writing. The new process of offset printing made it possible to reproduce actual samples of handwriting, and the work of thirty-nine children of junior and senior high school age appears in this little volume.

Ordinary Fountain Pen Used

Several typical examples from this collection are reproduced in these pages. All were written with the free easy flow of the pupil's natural handwriting, typical of work that might have been handed in as part of a daily assignment. Few of our children have adopted the broad-pointed pen which is advocated by many of the earlier manuscript writing enthusiasts. They appear to prefer an ordinary fountain pen, and all of their work here reproduced has been done with such an instrument. There is no

question but that each child develops a handwriting that is just as distinctive and characteristic as cursive writing has ever produced.

The doubt with regard to speed may be answered not only upon the basis of experience in Bronxville but by data accumulated both in this country and abroad by a number of persons who have been concerned with the problem.2 Our results in Bronxville are entirely typical. We have test scores over a period of years. About 20 per cent of our seventh grade children have never written anything but cursive script, as they have come to us from schools where that form was taught. They, therefore, are writing a cursive form to which they are accustomed and their rate scores are compared to those of children who have never written anything but manuscript.

Speed Almost Identical in Two Forms

Year after year our tests show that the average speed of manuscript and cursive writing is almost identical. For the seventh grade approximately 65 letters a minute, for the eighth grade approximately 73 letters per minute. About the same proportion of slow writers use manuscript as use cursive, and both forms are almost equally represented among the more rapid writers. Similar tests among Bronxville teachers in which adults who have accepted manuscript as a customary form of handwriting were compared with adults who always use cursive writing show the average rate of speed for good legible adult handwriting of either type is in the neighborhood of 122 letters per minute. A few adults wrote considerably more rapidly in cursive style. This rapid writing, however, was usually much less legible than the slightly less rapid manuscript writing.

The matter of legality should be disposed of easily and authoritatively. However, we find that custom is responsible for arbitrary rulings in various localities, tending to reject manuscript signatures. Some bank tellers who have not looked into the matter do not like to accept children as depositors whose signatures are unusual in form. In some states the motor vehicle departments have rejected manuscript signatures.

In Bronxville we put the matter up to our attorney whose opinion follows: "There is no provision of law which specifies the form of an individual signature, accordingly there is no legal objection to the socalled 'print writing' if that is the form of actual signature of the person using it."

Local Banks Accept MS. Signatures

We have two banks in Bronxville both of which accept manuscript signatures without objection, when they are mature and characteristic. Between the two, they have several hundred depositors of all ages who use a manuscript signature. The bonding company, which insures them against fraud, raises no objection to the manuscript signature. We have compiled samples of signatures from skillful masters of Palmer penmanship and mature exponents of manuscript writing. In the opinion of competent judges there is less distinctive quality in the Palmer signatures than in those in manuscript.

Some parents have complained that children are unable to read adult cursive writing. Realizing that this might arise as a problem, we have introduced opportunities for reading ordinary script into our elementary grades. Many of our elementary teachers use a cursive script on the blackboards at least half the time. We find that practically all of our third graders read ordinary cursive writing with fluency. However, we recognize that the handwriting of the average teacher is far more legible than that of the ordinary adult.

Recently, therefore, we have urged each child to bring from home samples of the handwriting of his father and mother which may be exchanged with other pupils, so that all children may have the experience of reading highly individualized scripts.

^{1&}quot;More Verse," Another Anthology From the High Schools, handcopied in manuscript writing, Bronxville Schools Bulletin No. 25, October 1935, postpaid 20c.

²Voorhis, Thelma G., Relative Merits of Cursive and Manuscript Writing, Bureau of Publications, Teachers College, 1931. See also articles by Edith U. Conard, Marjorie Wise, Frances M. Moore and others.

Experiment in Grades 5 and 6

By RICHARD BARNES KENNAN

OO little attention has been given to the gradual social development of children. When youngsters enter school they are extremely egocentric beings and their social perceptions are correspondingly narrow. Therefore, the social groups in the primary grades need to be small, natural and uncomplicated, with much direct teacher-pupil contact. In the third and fourth grades the gradually changing and broadening social interests of children call for a conscious, planned widening of social group membership, activities and opportunities. By the time pupils reach the fifth grade, the need for social contacts wider than a single room or a single class becomes imperative.

Committee Plans Cooperative Unit

During the last two years the elementary school at Georgetown, Del., has been experimenting with faculty reorganization as an important variable in improving the educational processes. Using Prof. James F. Hosic's proposal of a "Cooperative Group Plan for the Organization of Elementary Schools," the superintendent made an administrative attempt to provide a more opportune situation for pupils of the fifth and sixth grades.

The committee for the cooperative unit, headed by the superintendent, is made up of two fifth grade teachers and two sixth grade teachers as active members, with the music, art and shop teachers and the librarian as advisory members. After the committee adopted as a nucleus the social studies, the work was divided.

The social studies teacher acts as chairman of the unit, teaching all studies commonly placed in the social studies group — history, geography,

civics. The English teacher has composition, literature, reading and grammar. A third teacher gives instruction in arithmetic and science. The fourth active member of the committee acts as a general or unifying activities teacher, constantly endeavoring to fill in any discrepancies or omissions from the major subjects, helping with remedial work in arithmetic and English, and giving regular instruction in health, manual training, art and penmanship. The special music teacher carries on most of the music activities with the groups, and the manual training instructor assists with the larger woodworking projects.

The general topic for the cooperative unit each year, while the same for both fifth and sixth grades, has different goals and levels of attainment. For the 1934-1935 school year the theme was, "Exploration and Early Settlement of This Country." While we found it difficult to work in much arithmetic and science, practically all the work in social studies, English and unifying activities was built around the main theme.

Pupils Progress More Rapidly

Several interesting problems have been worked out through the cooperation of the fifth and sixth grade pupils and teachers. During the study of the Norsemen a playlet reached its climax in the Norse hero killing an animated dragon. In the "Discovery of America" unit, several of the boys made fascinating models of Columbus's boats. In the "Race for the New World," the children made accurate scale models of Indian villages, depicting utensils, dress and design.

The results achieved have indicated possibilities of a plan of greater individualized progress for each pupil. A successful adaptation of the cooperative plan has been made in this consolidated school at Georgetown, Del. It is designed chiefly to widen the social contacts of children beyond a single room and class.

As might be expected, several fifth grade pupils did better with the projects than the median of the sixth grade — an accurate indicator of the challenge to leading pupils.

The mechanics of the daily program are easily arranged. Pupils report to home rooms for opening exercises and the first quarter of the day, and are responsible to the home room teacher much as they had been to the single room teacher under the old faculty organization. After morning recess the groups change rooms, teachers remaining in their own rooms. In the afternoon the pupils report to home rooms for a brief attendance period and then proceed to their third quarter room, and after the afternoon recess a fourth and final shift of classes is made.

Group A, for instance, reports to the home room teacher and remains in her room until recess to study science or arithmetic. After recess Group A reports to the social studies instructor. In the first half of the afternoon session this group reports to the English teacher, and during the final quarter of the day the pupils are under the guidance of the unifying activities teacher.

This division into broad periods shifts classes at the usual recess breaks in the program. Children do

COOPERATIVE UNIT PROGRAM SCHEDULE, 1934-1935

Time 9:00- 9:10	Miss H.(Ar.&Sc.)		c.St.) Miss D. (Eng.	Mr.P. (Unif.Act.)
9:10-10:15	Group A (Gr. 6)		Gr.6) Group C(Gr.5	Group D (Gr. 5)
10:15-10:35	Morning Recess			
10:35-11:45	Group D	Group A	Group B	Group C
1:00- 1:05	Attendance			
1:05- 2:10	Group C	Group D	Group A'	Group B
2:10-2:30	Afternoon Recess			
2:30- 3:40	Group B	Group C	Group D	Group A
3:40- 3:45		Dismissal	from Home Rooms	,

not become tired with the long periods, as, unlike most high school periods, the work is interestingly varied and there is considerable active participation by all members.

Pupils appear to be stimulated by the varied and interesting classroom arrangement made possible by the cooperative plan. The English room is furnished with Colonial style maple tables and chairs and is provided with a low stage at the front of the room to encourage dramatic activities. The social studies room, also attractively furnished, connects with the English room through a useful little conference library, which serves both rooms under the convenient supervision of both teachers. The science and arithmetic room is provided with a science demonstration table, a dark room, a storage room and a large, sunny vivarium. The unifying activities room is equipped with benches, folding chairs, a printing alcove and a kiln for firing clay projects.

Each of these classrooms is equipped with combination black-board-bulletin board units, automatic heating-ventilating controls, electric clocks and outlets for radio speakers. Experience with the plan shows less need for duplicate materials for two fifth and two sixth grade rooms.

A remarkable smoothing of the adjustment from elementary to junior high school is one of the notable results of the plan. Junior high schools were organized to bridge the gap between the elementary school and the formalized high school. Most junior high schools, however, have tended to copy the senior high school set-up and thus have failed to achieve the liaison function. Not only has the cooperative plan as carried out in

the Georgetown school made it possible for pupils entering junior high school to orient themselves more quickly to the new environment, but the plan has definitely pointed the way for drastic improvements in the organization and program of grades seven, eight and nine.

The key to success of the plan is committee cooperation. Only by weekly meetings at which each member learns what the others are doing can the superintendent ensure consistent unified progress.

Forcibly brought out by the plan is the need for competent teachers. When one teacher guides the work of a group of pupils along certain basic social needs or experiences for a two-

year period, it is easy to measure the quality of instruction. If the majority of the teachers are forceful, the danger of a weak teacher is minimized, as (1) each teacher's instructional activities are primarily in the field of greatest strength, therefore, even the weak teachers are teaching the subjects that they are best adapted to teach; (2) the strongest teacher, as chairman, is of great service in guiding and directing the group; (3) the work of the cooperating teachers tends to raise the work of the entire group to a generally higher level, and (4) many of the discrepancies ordinarily unnoticed by one teacher are discovered, diagnosed and treated remedially by the unifying activities teacher.

As the teachers became familiar with the program their original skepticism changed to enthusiasm. Children are happier and better adjusted than they were when exposed to one teacher's personality, idiosyncrasies and attitudes for five hours each school day. Parents have commented favorably on this cooperative plan. The experiment will be continued.

Facts Fused With Art Principles

By MAY GEARHART

The reorganized program in the modern school definitely recognized the importance of art in the core curriculum. The problem before us involves this question: How may art keep its identity and at the same time become an integral part of the basic courses?

Broadly speaking, art teachers may cooperate in two ways: either by using the problems of the basic courses as projects in the regular art class or by actually bringing the basic course classes to the art room for observation and discussion of illustrative material having in itself real esthetic value. Creative appreciation is a valuable outcome.

Few teachers of social studies are

prepared to guide pupils in the discovery of art values. This necessary part of the inter-relatedness of things is dependent on establishing a successful partnership with art teachers. In the past, academic teachers generally used illustrative material for its historical content. To recognize art principles to be of equal importance with factual knowledge is a recent development.

A unified type of performance is now being undertaken whereby an art teacher and a teacher of a basic course work together often with the same class at the same time. Not only factual knowledge is recognized but time is given for discovery and discussion of art principles. Education takes place through migration of population. The practical worker in adult education in a community will do well to make contacts with those persons who have lived and learned in other communities.

The movement of adult education tends to develop along several lines, each perhaps with a slightly specialized group of followers. In this article an attempt will be made to show the importance of migration of population for the endresults of adult education: first, through a brief summary of agencies receiving considerable emphasis in adult education, and, second, through a comparison of education by means of these agencies with education through migration.

Persons concerned with the preparation of adult education materials often think of adult education primarily as an extended use of printed materials. Accordingly, and with justification, great emphasis is placed on reading. Teaching illiterates to get meaning from printed symbols, motivation of reading, determining the kind of reading material available and developing reading tastes are aspects of the problem commonly emphasized.

Others interested in the possibilities of adult education consider the radio from similar standpoints: Who listens in? When does he listen? To what does he listen? How may he be induced to listen to programs that educational leaders recommend?

The forum, now showing some revival, similarly reaches a socially important segment of the population with programs which in part answer questions and in part stimulate thinking along new lines of individual or social interest. Adult-education classes break the group into smaller



Migratory Americans

By HAROLD H. PUNKE

units and allow a closer contact between leaders and learners.

In activities such as the foregoing, with possible exception made for education classes, some effort will probably continue to be wasted by the nonsensitive superior attitude of giving to persons, who may have had restricted opportunities to secure formal education, something in the way of cultural goods, whether the recipient is interested either in the goods or in the method of dispensation. In brief it is easy for adult education to become formal and forced, both as to content and as to method.

One reason for this mistake is that persons in charge of adult education too often assume that adults are going to undertake their educational activities with a formal or professional attitude such as might be expected in the upper part of our secondary schools or in our professional schools. The fallacy is in assuming that education for the average adult is his major full-time job, as it is in

the levels of formal education suggested.

The full-time job of the average adult is making a living and maintaining a family. Education for him is secondary. This is true regardless of the educational level attained by the individual. Hence for these persons adult education will be informal and largely incidental, both as to content and as to method of approach.

Probably the most informal learning situations for children are found in family associations and in community play groups of various kinds. Gossip is a kind of informal learning, an exchange of news, among adults. Boards, committees and legislatures sometimes get news and exchange views in a similarly informal way. One thing that these learning situations have in common, which forum, radio and reading lack in progressively increasing degree, is what Professor Cooley called a face-to-face relationship, an intellectual exchange between giver and receiver. One type of adult

education which has been taking place on the basis of this informal face-to-face relationship is extensive enough to deserve more attention than it has received. That type is the education that results from migrations of population within the country.

It is a commonplace that for several years before the current depression there was a steady net migration from rural to urban communities. C. Warren Thornthwaite states that during the period 1920-1930 the net migration from farms to cities was roughly 8,000,000 persons. "Net migration," however, is merely a balance. It does not indicate the total cityward movement, nor does it suggest the extent of the movement toward the country. Thus for the period 1920-1934 the total movement from farms is estimated at 25,811,-000, and the total movement to farms at 19,805,000.

Considerable Distances Covered

During several individual years of the period, more than 1,500,000 persons moved to farms, and more than 2,000,000 moved from farms. The annual balance of movement was from farms for each of the years 1920-1929, to farms for the years 1930-1932, and from farms again for the years 1933-1934.

The fact that much of the movement of population referred to has been movement over considerable distance is shown by the amount of movement from one section of the country to another. In 1930, for example, there were 5,145,999 persons born east of the Mississippi River and living west of the river, and 1,-648,832 persons born west of the river and living east of it. Similarly in 1930 there were 3,297,329 persons born in the South, east of the Rocky Mountains, and living in the North, and 1,878,192 persons born in the North and living in the South.

If to the foregoing figures were added the migration from one community to another of the same type and within the same state, the figures would of course be much larger. The persons constituting most of the migration are youth and young adults. No doubt most of these young people migrate in search of greater social and economic opportunity than that afforded by the home community; some perhaps migrate in answer to an adventurous spirit, but the important thing here is that in all cases they migrate.

The foregoing data are presented to show that literally millions of the native-born people now living in the United States have migrated from some other part of the country to the part in which they now live. Most of these people were in the optimistic and energetic years of young adulthood at the time of migration, eager to see, to try, to modify and to adopt the new.

The important thing for adult education is that a large amount of such education naturally and incidentally results from extensive migration. The fact that most of the migrants were young adults means that in recent American society migration has not been by families but by individual members of families. In moving into new communities and distant parts of the country these young people learn not only of different landscapes but of life in different vocational and cultural groups. Many of their new experiences are related through correspondence to members of the family in the home community. In visits "back home" a great deal is also reviewed around the family table or fireside.

Informal Exchange of Experiences

When these young people set up homes in the new community, and members of the parental family come to visit them, the same informal exchange of experience and of ways of doing things takes place in the new environment. More important, however, is it that people who have lived for a time in different sections of the country have learned more about the interests, problems, strains and recreations of persons in those different sections than they would likely learn through the forum or through the

more impersonal organs of mass impression — the press and the radio.

The fact that a large proportion of the urban population of today has lived in rural communities means that they know in a direct and elemental way more about the farm and the thinking of the farmer than could be the case without that experience. The fact, too, that we have had a steady stream of persons moving from cities to rural areas, usually a smaller stream than that moving to the city, although in early depression years considerably larger, means that a great many persons are living in rural communities who have had direct experience with urban life and with whatever social, recreational, vocational and cultural opportunities and disappointments it offered.

Naturally these persons are going to reflect and compare and strike balances, both during their individual leisure and during their visits with relatives and neighbors. Since the depression, leadership in community enterprises in numerous rural communities has come from such migrants who have seen how necessary activities were carried on elsewhere.

More Potent Than Formal Teaching

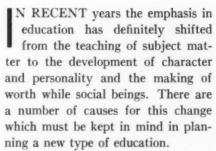
The concluding remark might then be made that any movement that influences the information, thinking and attitudes of the people as much as the migration of our population should not be overlooked by persons professionally interested in adult education. Certainly the direct personal contact with members of one's own family or immediate community would seem more potent in influencing opinions and attitudes than would such impersonal instruments as press and radio, particularly if it is kept in mind that large sections of the country greatly affected by migrations are not extensively reached by newspapers and radio, i.e. rural areas, especially in the South. What such a relative or personal acquaintance may say would in many instances seem a more potent influence than what might be said by a teacher or leader of an adult-education group.





Life in a Science Room

By DENNIS GLEN COOPER



The large heterogeneous school population of today includes a much greater range of personalities and abilities than formerly. Of particular significance are those children of distinctly limited mental capacity and restricted interests, whose academic learning can never be great. They are especially needful of stimulation, direction and guidance to the ways of a good and socially valuable life.

Another obvious factor demands consideration. Life presents an unusual number of temptations and distractions to the youth of today, and education must help these youngsters to develop habits, ideals and attitudes that will give them the courage to stand against the destructive forces with which they so often come in contact and which they are bound to meet in the future.

One of the first steps toward achieving this goal is to have the children like school and to accept and identify themselves with its aims and ideals. To do this we must vitalize education in every possible way. This involves a number of fundamental considerations: (1) the physical surroundings of the pupil, that is, the appearance and arrangement of the schoolroom itself; (2) the attitude of the teacher; (3) the nature of the children at adolescence, and (4) the selection of subject matter to meet the needs and interests of pupils.

Prof. Harry Overstreet in a recent lecture remarked that "a sound mind











and a sound body" have frequently been considered the prime essentials for a happy, successful life, and that they should be the ultimate objectives of education. Doctor Overstreet feels that this is incomplete; that what we really need is "a sound body and a sound mind in a sound world." The schools must do their best to develop sound minds and bodies, but they must also strive to create a world in which it is wholesome for these minds and bodies to live.

In our science room we are trying to provide a new world for our children — a world that will stimulate them, that they will be eager to explore, that will contain so much of beauty, interest, excitement and adventure that genuine enthusiasm and sincere effort cannot help but result.

In our science classroom we have made a sincere attempt to create the kind of environment that we feel is essential to the proper conditioning of our youngsters. Much of the work in general science is in the field of biology, the study of life. Since we are unable to take classes into the field, we maintain alive in our science room many of the plants and animals studied by the classes. We have protozoans, earthworms, insects, crayfish, snails and clams, as well as tropical and fresh water fish in balanced aquariums; we have woodland or desert habitats containing newts, alligators, lizards, snakes and turtles; we have canaries, and such mammals as white and "dancing" mice; white, hooded and "kangaroo" rats; guinea pigs, and rabbits. Since we cannot take the children to the animals, we bring the animals to the children, that they may study them by direct observation rather than solely through the medium of the printed page.

Weekly Exhibits

And this is not all. The large bulletin boards in the room contain colorful exhibits of pictures, drawings or reports attractively arranged and changed weekly. Among the topics that have been well illustrated in this way are the following: the life of

primitive man, the heavens, vertebrate animals, animals of the deep sea, wild flowers, fossils and fossil hunting, scientific laboratories, clothing, good foods, the seasons, popular superstitions, sports and exercise, great scientists, wonders of plant life, electricity, the development of transportation. Some of the pictures used in making these displays are from my own collections, while many are borrowed from the Detroit Children's Museum. The displays are always arranged to correlate with the work being studied by the various classes.

In Wall Cases and on Tables

Special wall case or table exhibits, likewise made up of my own and museum materials, are changed weekly; these with experimental set-ups help to make the room attractive as well as educational. Typical exhibits are: fuels, clothing, rocks and minerals, furbearing animals, bird friends, common insects, building materials, invertebrate and vertebrate animals, sea life and products of far away lands. Experimental set-ups that always arouse a good deal of interest are those concerned with oxygen and hydrogen, food testing, osmosis, electricity, air pressure, scientific machines, sound and sight, gravity, day and night, the seasons, germination of seeds.

The room is kept in order by a group of ninth grade boys who act as pupil assistants, coming to the room after school to work at whatever tasks especially interest them. Some feed animals, clean cages or care for plants, while others arrange bulletin boards, exhibits or experimental apparatus. These boys not only derive a great deal of pleasure from this work, but also receive invaluable training from such cooperative effort.

When a class enters the room, the pupils are not required to sit down immediately. Rather, they are encouraged to move about freely to examine the various exhibits that are displayed in the room. They move eagerly here and there, talking and laughing quietly as they search for new objects of interest. When they

have had time to make the rounds they are called to order by an electric buzzer, and the formal class session begins.

During the ensuing period numerous activities are introduced to maintain the high level of enthusiasm already developed. Bulletin boards and exhibits are brought directly into the class discussion, microscopes are used frequently, experiments are performed by teacher or pupils, plants and animals are studied through observation of the forms kept in the room, and many appropriate motion pictures and slides are introduced.

The Detroit visual education department performs a valuable service by supplying on request films and slides on a great variety of subjects for use either in the school auditorium or in the classroom. The latest bulletin lists 280 auditorium type (35-mm.) films, and 208 classroom type (16-mm.) films, and an enormous number of slides. Besides these, I have many films and slides of my own. The personal touch seems to add appeal to these films.

The picture that is probably enjoyed the most is one we have made of our own classroom and the many activities carried on within it. Working after school over a period of several months, my assistants and I photographed many of the animals, displays and exhibits, as well as afterschool and classroom activities.

Film of Own Classroom

The film, called "Life in the Science Room," is shown to all the new classes as an introduction to the work to acquaint them with many of our methods and activities. It is always received with enthusiasm. Incidentally, the film has been presented before many other groups in Detroit and elsewhere. It is frequently shown to classes in educational and adolescent psychology and in the teaching of natural science at Wayne University. Basing my opinion on the warm reception given the pictures by these groups, I believe that films of this kind would be an invaluable aid in the training of prospective teachers.

This Year's Crop of Laws

By M. M. CHAMBERS

T REGULAR legislative sessions this year Massachusetts and New York provided that pupils in nonprofit private or parochial schools shall be entitled to receive transportation at public expense in the same manner as those attending public schools. These measures aim to increase the accessibility of school facilities, but their constitutionality may be doubtful. A similar law was held invalid in Delaware two years ago.¹

Kentucky provides that any independent school district maintaining at least an approved tenth-grade school service for white children may furnish free transportation for such children to attend school in an adjoining district to complete the eleventh and twelfth-grade school work, and may contract with the adjoining district for such children to procure eleventh and twelfth-grade service therein. The same act specifies that each independent school district shall provide either by the establishment of a school or by contract with another district for at least an approved twelve-grade program of school service for its colored children; but no stipulation is made concerning transportation of colored children. Louisiana amended its school transportation law to permit parish school boards to transport any children living more than one mile from any school of suitable grade.

New York requires medical inspectors, principals and teachers in charge of schools to make eye and ear tests of pupils at least once a year. The tests for hearing must be made with an audiometer or with some scientific device approved by the commissioner of education. Another act empowers boards of education to maintain public kindergartens, free to resident children between the ages of four and six, or to children of a higher minimum age at the discretion of the board. New York also places jurisdiction of minors under the age of eighteen in the hands of children's courts. These courts will be the judicial tribunals for enforcing the compulsory education law.

Virginia amended and reenacted the law relating to the establishment of industrial, agricultural, household arts and commercial schools by the state board of education so as to include handcrafts and domestic arts, and also authorized county boards of supervisors and city councils to establish, equip and maintain departments of handcrafts and domestic arts in the schools under their jurisdiction. Louisiana established a new state-supported trades school for white persons at Shreveport.

Louisiana stipulates that all textbooks furnished free to pupils shall,

Only eight states had regular legislative sessions this year. A detailed and comprehensive review of the new enactments affecting schools, however, would require much space. Some of the more significant of the new statutes are briefly mentioned here.

whenever possible, be printed and bound within the state by bona fide residents under contracts let by the state printing board. If the state board of education is unable to acquire publishing rights to suitable textbooks, it is directed to have textbooks written and compiled on its own initiative. Pupils are to receive at public expense not only textbooks, but also school supplies, including paper, pencils, pens, ink and the like.

South Carolina created a division of textbooks in the state department of education and a state school book commission composed of the governor, the state superintendent of education, the director of the division of textbooks, one member of the state board of education to be selected by that board, and three county superintendents to be selected by the Association of County Superintendents. This commission is directed to provide all the textbooks for use in the public schools on a rental system whereby the pupils will pay an annual rental to be fixed by the commission, sufficient to pay all costs of administering the system and purchasing the books.

Counties or school districts may continue or establish their own text-book rental systems without conflict with the new act. School districts having 5,000 or more pupils may choose and purchase their own text-books and retain all rentals received from their use. Upon resolution of the legislative delegation of the county affected, any county or school district may abandon its own rental or free system of textbooks and come under the operation of the state text-book rental system.

The system will be administered by the newly created division of textbooks within the state department of education, consisting of a director appointed by the state superintendent

¹State ex rel. Traub v. Brown et al., (Del. Super. Ct.), 172 Atl. 835 (1934).

and a clerical assistant. The director is authorized to appoint five field workers at salaries of \$1,800 a year and traveling expenses of not exceeding \$900 per year each. The initial appropriation for the purpose of establishing the system is only \$5,000, and it is clearly the legislative intent that it shall be self-supporting, all subsequent expenses being paid from textbook rentals collected.

The school book commission may either rent or buy outright books from private publishers, but any such contracts must provide for installment payments over a period of three years. The commission is authorized to borrow, by issuing negotiable notes bearing interest at not to exceed 31/2 per cent per year, and to pledge for their repayment all books in its possession and all rentals collected by it, except such as are necessary for the payment of all administrative expenses. The act further specifies that the full faith, credit and taxing power of the state are pledged for the payment of such notes. All note issues must receive the written approval of the state finance committee. All textbook purchases must be made at competitive bidding.

Textbook rentals are to be collected by the school district from the pupils at the opening of each school year, and no book may be delivered to any child until the rental for the year has been fully paid. The director is commanded to adopt, in conjunction with the state board of health, rules governing regular disinfection of all textbooks, and the fumigation or destruction of books from quarantined homes.

Oaths of Allegiance

The school book commission is authorized to waive all rentals on books for as many elementary grades as available funds will permit, at the beginning of the fourth year of the operation of the act, or earlier; and to waive the rentals on high school textbooks at the beginning of the sixth year, or earlier if funds be available, in order that textbooks shall be supplied to the school children of

the state without charge at the earliest possible date.

The epidemic of mandatory oaths of allegiance and flag salutes, which characterized the legislative year of 1935, is on the decline but a few milder laws looking toward regimented observances continue to appear. A New York act requires boards of school trustees to purchase and display in each assembly room in each school an American flag. This measure is effective Sept. 1, 1936, and failure to comply with it is made a misdemeanor. Louisiana designates the first Wednesday in May as the Huey P. Long Educational Memorial Day in all public schools. Every school is be furnished at public expense with a wall photograph of the late senator and copies of a poem extolling his virtues, which is prescribed as the official song for the ceremonies.

Teaching Staff

Louisiana abolished the authority of the state budget committee in the matter of passing upon the personnel of parish school board employees. This erases from the statute books the notorious act of two years ago which gave dictatorial authority over the employment of all public school teachers in the state to certain official henchmen of the lamented Senator Long. The parish school boards and parish superintendents have now been restored to the authority they previously had in the selection of teachers and other employees.

Virginia authorizes the state board of education in its discretion to provide for the payment of a certain percentage of the salaries of teachers in the public schools while such teachers are absent on account of sickness or other disability, and to provide funds therefor. New York amends the so-called tenure law so as to limit to one additional year the probationary period of a teacher who has rendered satisfactory service as a regular substitute for a period of two years.

The event of the year in legislation affecting teachers specifically seems

to be the enactment in Louisiana of both a statewide tenure law and a statewide retirement system. tenure statute is a model of brevity. providing for a probationary period of three years of service in any one parish, after which, if not immediately dismissed as unsatisfactory, the teacher acquires permanent status and can be discharged only after a hearing on written charges of wilful neglect of duty, incompetency or dishonesty. The hearing by the school board may be private or public at the accused teacher's option, and either party may appeal therefrom to the courts.

Tenure and Retirement

The retirement act became operative Aug. 1, 1936, and membership in the system is compulsory for all who become teachers thereafter except those already members or eligible to become members of local retirement systems. The latter who may wish to come under the statewide system must elect to do so within one year in order to receive any prior service credit. Retirement is optional with the teacher after reaching the age of sixty, and compulsory at age seventy. There is provision for disability retirement at any age after ten years of creditable service.

In the nature of things the provisions regarding computation of contributions and benefits, safeguarding of funds and other items of administration are lengthy and complicated. In general they seem to follow good practice in other states. The reader who wishes to study the act in detail may refer to it as Louisiana Act No. 83, Regular Session 1936.

Kentucky repealed and reenacted the law regarding teacher retirement in cities of the first, second and third classes. The local retirement system, when created by the board of education, is to be a corporation capable of transacting all of its business in its own name. The board of trustees of each system may require the participating teachers and other employees to contribute to the retirement fund at rates fixed on the basis of

actuarial investigation, and the local board of education may contribute sums at least equal to the total contributions of the members of the system, except that the board's contribution must in no case exceed the returns from a tax rate of $4\frac{1}{2}$ cents per \$100 of assessed valuation in cities of the first class or 4 cents in cities of the second or third class.

School Finance

New York authorizes boards of education to provide for the payment of back taxes without penalties, in such installments as the board may deem to be for the best interest of the school district and of the property owner, and provided that such taxes are paid within a period of one year from the date of the board resolution authorizing such payment.

Pennsylvania reenacted an earlier tax abatement act, the new version providing that 1935 delinquent taxes must be paid with principal and interest, if any accrued, in order to qualify the taxpayer for payment of back taxes in installments over a period of five years. The entire amount of such back taxes may be paid in a lump sum at face value without obligating the taxpayer to pay 1936 taxes. The act is not intended to establish a policy of abatement year after year, but is intended to provide a last opportunity for delinquent taxpayers to adjust their situation prior to Nov. 1, 1936.

New York authorizes the issuance of bonds for the construction of school bus garages and also for the purchase of school busses. Bonds for the latter purpose must mature within a period not exceeding five years. Another act regulates in considerable detail the issuance of serial bonds by school districts for the acquisition of land and for the construction of new buildings. The maximum period for which such bonds may run is fixed at twenty years.

Virginia authorizes the waiving or modification of certain statutory limitations on the making of loans from the state literary fund to county and city school boards, in order to enable such boards to comply with the federal regulations governing loans and grants from the federal Public Works Administration. Another act authorizes and prescribes regulations for the issuance of refunding bonds by counties, magisterial districts and school districts.

On June 8 President Roosevelt signed the George-Deen Act, which will take the place of the George-Ellzey Act for vocational education, which by its own terms will expire on June 30, 1937. The new act authorizes annual appropriations in aid of vocational education in the states in an aggregate of \$12,000,000, one-third of this sum being allotted respectively for education in agricul-

ture, trade and industry, and home economics. In addition, an annual appropriation of \$1,000,000 is authorized for the training of teachers of vocational education in the foregoing three fields. Furthermore, \$1,200,000 annually is authorized for vocational training in distributive occupations such as retailing and wholesaling.

Under the new act the states and territories participating in the grants will not be required to match the federal subventions dollar for dollar, as heretofore, but for the first five years in which the act is operative, they must match 50 per cent of the grants, and each year thereafter an additional 10 per cent until 100 per cent matching is reached in 1946.

Speaking of Politics

By G. L. H. JOHNSON

The position of school folk seems to be that it is all wrong for politics from the outside to touch the schools, but quite all right to have as much politics on the inside as various individuals and groups can "get away with." It is to suggest the old saying, "It depends upon whose ox is gored."

At the Washington (National Education Association, 1934) meeting each candidate had a regular organization, hotel headquarters and all sorts of campaign literature. There was the usual "whispering campaign." I for one was glad that we had no laymen present. It was all so disgusting. I heard at least a dozen constructive educationists declare that they had little interest and probably would go fishing next time. There were stage stunts depicting the history or the life of the candidate's home state. Typically political! As if the state had anything to do with the suitability of the candidate for a professional office, which we deny when in search of good educators for regular positions.

Now, I say it ought to be regarded as a violation of professional ethics. It is just as ethical for a teacher to buttonhole board members for a job in school, using all her arts and political connections, as it is for her (or him) to be doing that sort of thing for herself or some friend for an associational office. Politics is politics—as damaging on the inside of the profession as on the outside.

If we must be purely democratic—and we should in reason—let names be proposed in the Journal of National Education Association with brief sketches of training and work. Usually such names will carry their own weight, especially if work in the group has been long and able. Then let the rating follow without any sort of campaigning. If there is, let it be exposed as is anything else unethical or unprofessional.

We cannot get 100 per cent, but we can build up a powerful sentiment against professional politics. I prefer the large nominating committee and the requirement that there be at least two nominees for each office.

Happy to Say

By WILLIAM McANDREW

THIS month's bouquet is for Jesse Newlon for his continuing reminder to teachers that schools were made public in America on the promise that they would keep politics pure. How can they do that, asks Jesse, unless teachers get into politics and stay?

MANY a good schoolman, knowing it is his duty to cultivate the art of conversation, finds that when he has become a tip-top talker he has to begin to cultivate the art of silence. Doctors, engineers, bankers, even lawyers excel us schoolmasters in the habit of saying nothing at the right time. The plight of the fat man is that everybody knows that he eats too much. He carries evidence wherever he goes and is secretly despised for it. The supertalker similarly handicaps himself.

A DECENT man may properly, before he goes to sleep at night, forgive himself for his unworthy deeds of the day. Such regret as he ought to feel for not making a perfect score should be felt deeply enough but be corked, sealed and put away with a resolve to have a better tomorrow. Regret or remorse, left lying loose in the mind, ferments and festers. Go to sleep with a clean mind and heart. It will be useful when the next day comes.

HAIL the rising time. Jump out of bed at a bound. Salute the morn and rejoice that you are still alive and in a world in which the worth while things are not all finished.

SLOWLY, and, Good Lord, make it surely, school superintendents are moving toward saving educational administration from the damage of changing horses in midstream. Even the most democratic advocate of teacher participation sees that the officer who must be responsible for policies and successful teaching cannot be subject to removal before he is well on the road to success. No effective organization could escape bankruptcy if its managers were changed as often as are school superintendents. Beveridge, Chadsey, Chewning, Bénézet, Judd, Shankland and Morgan have given the association facts enough to make a tenure provision for superintendents logically inevitable. But many good men's feet are in the frigidaire. If common fraternal spirit is not vigorous enough in the association a patriotic devotion to education, the nation's safeguard, should be stiffened to a degree that will move the national society to demand that retention or dismissal of superintendents depend on the results of the superintendent's supervision of the schools.

PUNISHMENT may, for all I know, stop some wrong doing, but all the recent researches that are reported in the prints I have read agree that it is much inferior to other means of inducing study or progress in school and in behavior. Intent to "lick hell out of him" may result in licking it in.

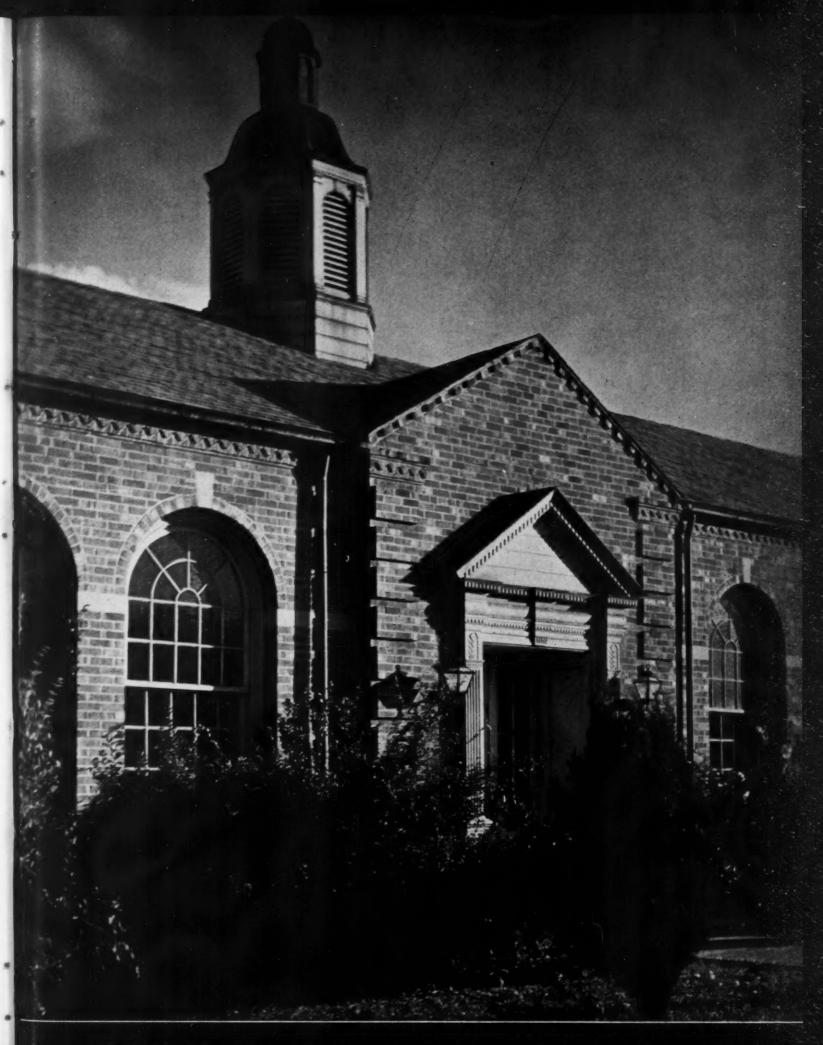
A CORPESPONDENT wants to know why there is no bouquet for Congressman Thomas Blanton of Texas, author of the "red rider" on the District of Columbia appropriation bill, a requirement that every Washington teacher shall swear twice a month to have kept a muzzle on. Very well, send in your nettles, thistles, spathyema, foetida and stink weed.

MONG the many stupid fallacies being promulgated today, none is more disastrous than the doctrine that better educational results are obtained from large than from small classes.

It is easy to discover how this superiority is proved to local school boards. Some teacher known to be unusually qualified to handle large groups is selected. The teacher knows in advance what is wanted. She knows, too, that if successful she will in a short time be advanced to a principalship or some other position, with a fat increase in salary. She completes her "experiment" and her report closes with "hereafter always give me the large class." But the great mass of teachers have not her qualifications. They are just ordinary men and women. They could handle successfully classes of thirty or even thirty-five pupils but, following the report of the former classroom teacher, now principal of Elementary School X, they find their classes increased to forty, fifty or even more pupils. They do not dare to protest for they know what the consequences would be.

Claims for large classes, often supported by supposedly scientific experiments, are based solely upon results of tests of limited and frequently unimportant effects, scores in objective tests and the like. The effect of large classes upon the nervous systems of teachers themselves and, more important still, upon the health and happiness of the children they teach has not been measured. A marked increase in class size in a city school system works an ominous increase in the number of teachers on the verge of nervous collapse.

Of the many paradoxes that characterize present educational sophistries, none is more absurd and more tragic in its results than the doctrine of the superiority of large classes—a doctrine accepted and promulgated by many administrators who, in almost the same breath, prate about the necessity of every teacher's discovering and caring for individual differences.—Fletcher Harper Swift.



THE SCHOOL DIANT

Relief in Major Rôle

N DEC. 26, 1934, ground was broken for the largest FERA school project in Minnesota under the sponsorship of the Federal Emergency Relief Administration and the local school board. This project, involving an addition to the Little Falls High School, was completed and dedicated on Dec. 18, 1935, less than one year from the time actual work had begun.

The entire project represents a total expenditure of \$128,377, which is broken down as follows:

Material, equipment, architect's fees
Interest on bonds, project engineer
Paid by board of education
Nonrelief labor (FERA)
Material cost (FERA)
Relief labor
Total

\$62,266

\$62,266

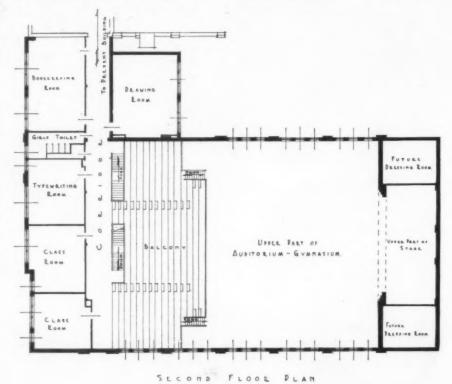
\$18,773

The total floor area of this addition is approximately 18,000 square feet, with a basement room 33 by 90

FIRST FLOOR PLAN

By EARL C. VAN DUSEN

feet, which can be made into a cafeteria with little additional expense. It provides: (1) added classroom facilities, band and music room (also available for small community gatherings), three regular classrooms, commercial rooms (typewriting, stenography and bookkeeping), home economics (cooking and sewing) and a superintendent's office; (2) a combined gymnasium-auditorium with a seating capacity of around 1,500.



Plans were drawn so as to use all available space to good advantage. The stage is placed on one side of the basketball court so that the distance to the elevated seats is reduced to a minimum. All pillars have been eliminated, thereby making each seat desirable either for basketball or entertainments on the stage. Another interesting feature is that the hall floors are on the same level with the old building hall floors.

Because of a low school district valuation it was deemed advisable not to ask for more bonds than could readily be voted. Therefore, the proj-



A view of the new addition to Little Falls High School at the time of its dedication last winter.

ect was presented to the people for approval in the form of a bond issue in the amount of \$30,000. The bond was voted by a large majority after it had been explained that there was a decided need for classrooms as well as a gymnasium and auditorium sufficiently large to accommodate crowds that would gather in a city having a population of 5,000 and a trade population of 20,000.

The fact that a project was needed for worthy relief workers in the community, and also that one dollar under the federal arrangement could be made to do the work of two had an effect in influencing the decision of the voters. Furthermore, an explanation that there was available \$15,000 cash saved from operating expenses and unused levies for equipment, which would be used in equipping the new addition and paying the architect, was likewise instrumental in obtaining a favorable vote from the electorate.

When the architect estimated the

cost of material for absolute necessities in the building and labor costs if built under contract, it was discovered that a minimum outlay of \$84,000 would be necessary, exclusive of equipment. Broken down into material and labor the estimate showed a material cost of \$45,700. Later this material cost was increased appreciably by a vote of the board of education when it was discovered that the original estimate did not provide for a guaranteed roof, terrazzo floors in the hall and stairways, a fireproof ceiling in the gymnasium, acoustical treatment to eliminate reverberations and a modern floor laid in mastic. When this additional material and other items left out of the estimate were supplied and nonrelief labor not provided by the FERA was paid for, the total actual expenditure was increased to \$73,700.

The bond issue requested, together with the \$15,000 on hand, would have provided for the original estimated cost of material and nonrelief labor,

but would not have provided for architect's fees or equipment.

Application was then made for an allotment from the FERA for materials, with the result that the administration approved the project containing a request for \$15,715 for material, \$6,840 for nonrelief labor and \$1,044 for rental of equipment. This released the \$15,000 on hand, which could then be used for equipment and architect's fees but was later voted as already stated.

There is a common belief that relief labor is not as efficient as contract labor and that wages paid relief labor for the same amount of work done is greater than that paid under contract. Because of this belief the application for approval of the project at Little Falls called for an estimated cost of construction, including equipment, of \$171,597. This amount seemed out of proportion to what the expenditure should be, but it was understood that all labor possible was to be performed by relief clients even



The gymnasium-auditorium has a seating capacity of 1,500. The stage is placed on one side of the basketball court. All pillers have been eliminated, thus ensuring an unobstructed view from each seat.

though machinery might perform the task more quickly and efficiently.

All excavation work was, therefore, done by hand. The sand and gravel was loaded on trucks and hauled to near-by lots which required filling. On days when trucks were not available (truck drivers could work but thirty hours a week) wheel barrows were brought into use to make large stack piles for filling in about the building when construction should be completed.

In Minnesota, as in other Northern states, the mercury in January and February has a tendency at times to attempt to hide below the zero mark for several weeks at a time. The year 1934-1935 was no exception though it was a comparatively mild open winter. In spite of the cold weather and the frozen ground, work progressed to the point where by the

middle of February pouring of concrete for the footings had begun.

The greatest difficulty encountered in the whole program was the scarcity of skilled labor on relief. Particularly was this true of brick layers. This difficulty was overcome by holding evening classes for theory and day classes for practical experience for all those who wished to learn the trade. The FERA county engineer conducted the school while one of the local union brick layers supervised the work on the job. All back-up walls and partition walls were laid by these beginners. They also were permitted to assist with the sand lime brick in the back court after becoming proficient with common brick. Some of these men became quite skilled in their work, so much so that they are now entrusted with face brick work under supervision and

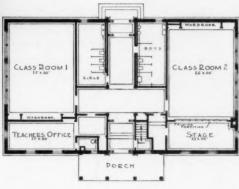
draw the wages of skilled laborers.

This has been the outstanding achievement of the project at Little Falls. It has encouraged men to learn new occupations so that when the relief set-up is over they will have two or more fields of work to enter if an opportunity presents.

It should be added that the bonds were sold at a premium of \$75 with an interest rate of $2\frac{1}{2}$ per cent. This was due to the fact that the time was limited and a definite plan of retirement was provided. Bonds fall due to the amount of \$5,000 a year for a period of six years beginning in 1937. Interest will, therefore, amount to a total of \$2,362.50, which, when added to the total amount expended for the addition, makes the small sum of \$62,266.50 for a fully equipped fireproof addition, insurance for which has been set at \$130,000.



This small schoolhouse accommodates eighty pupils and seven grades in its two major classrooms. It even has a stage for general assemblies. The building represents a unit cost of 40 cents a cubic foot.



All in Two Rooms

By RANDOLPH EVANS

DUCATIONAL activities in the Oakdale School, Oakdale, Long Island, center in two major classrooms. This plan was evolved as a result of local requirements guided by the regulations of the State Department, and provides for the needs of approximately 80 children.

A site adjacent to the old building now razed was chosen for the new school. It has a frontage of about 394 feet on the main highway with a depth of 337 feet. The ground is level, with the advantage of many fine trees. In considering the land-scaping plan it was necessary to provide for the needs of bus transportation for pupils, parking space and play areas.

On this property the building is placed with its main entrance 150 feet back from the road. It is old Virginia colonial in type with its white cupola, slate roof and white portico and columns. The cost was \$30,000,

which with a cubage of 75,000 represents a unit cost of forty cents a cubic foot. The two large rooms are its main features, these being subdivided into seven sections so that the children can be enrolled in all grades. At the end of one room a stage is provided for general assemblies and meetings. A folding partition separates it from the classroom. At the end of the other is a teachers' office.

The basement is under less than half the building area and is restricted in use to the boiler room and storage. The foundation walls are of concrete with the basement floor reenforced for water pressure.

The first floor construction is of light weight steel bar joists and gypsum plank. The finished floors are of maple in the classrooms, teachers' offices and stage. The corridor floors are of asphalt tile; toilet room floors of tile.

The exterior walls are of face brick

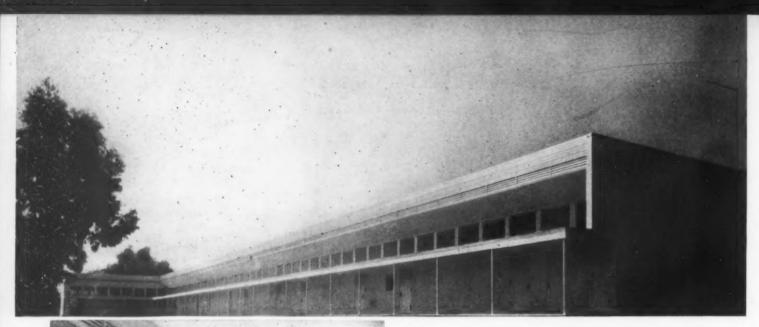
with a bonding backing tile. The metal lath for the exterior walls are projected 2 inches clear by means of adjustable metal clips.

Interior walls are of terra cotta block for the corridors and of gypsum block for the other partitions. The wainscot in the corridor is of glazed structural terra cotta. The wainscots in the toilet rooms are of facing tile.

The ceiling is constructed of the light weight steel joist system with ribbed metal lath and acoustical plaster.

A low pressure steam system is used for heating. The oil burner and heating system have a complete arrangement of equipment for safety and automatic regulation consistent with reliable operation.

Each classroom is equipped with a unit heater beneath the windows. The heaters are set for intake of fresh air at the rate of 1,200 C.F.M., which is in accordance with state regulations. The air is vented through a grille in the wardrobe ceiling and through ducts leading to a venthood in the cupola on the roof.





Inside Turns Out

School life in the open air is realized by Architect Richard J. Neutra in the Bell Experimental Public School of the Los Angeles board of education. Each classroom faces east and west and opens through a 16-foot sliding glass partition into an outdoor classroom. All enclosed corridors are eliminated. The kindergarten, shown below, faces south and has its own adjoining play patio. Roof overhangs, supplemented by vertical awnings, eliminate too much direct sun radiation.

While particularly adapted to school activities in favorable climates, the design of this school embodies details generally regarded as forward looking and offering new opportunities for school project work.



Sound Facts on Noise

By W. K. FRIEND

HERE is a growing realization on the part of school officials of the deleterious effect on pupils and teachers of avoidable and uncontrolled noise in the school building. This realization has been brought about in a large degree by publicizing the result of researches from various psychologic and sound laboratories throughout the country.

What is essentially a fear reaction in the pupil is often caused by such confusing noises as occur in corridors, gymnasiums, cafeterias and classrooms. Young people are normally highly susceptible to stimuli of all kinds. When they try to shut out from their consciousness all irrelevant stimuli — in other words, when they attempt to concentrate - they find it exceedingly difficult in the presence of distracting noises. The confusion encountered in the average schoolroom is a large factor toward the inability of pupils to learn how to concentrate.

Noise Develops Nervous Tension

Noise has been shown to be extremely irritating to the nervous system. It develops a high nervous tension with accompanying bad physical effects. In an environment of noise, there are constant distractions, relaxation is difficult and efficiency is reduced. There is a real need for studying the noise and sound control problem.

Sound is a form of wave energy which is emitted from a vibrating source in concentric spherical waves. It travels, under ordinary conditions, at the speed of about 1,120 feet per second, or as fast as a rifle bullet. A large part of the sound energy emitted in a room is reflected from the surfaces it contacts much in the same manner as light is reflected. A portion, however, is absorbed at the various surfaces against which the

sound waves strike. If, however, little is absorbed at the contact points, most of the wave energy is left free to continue its reflection back and forth in all directions much longer than is desirable. Under such conditions, succeeding sound reflections may be added to new sound energy and a level of sound energy may be built up to a very high point. Then it becomes distracting and harmful. This continued reflection of sound in a room is called reverberation.

Furnishings That Absorb Sound

The correction for this undesirable condition is found in reducing the intensity of original sound, and in making the objects and surfaces that the sound waves strike of material that will absorb a larger part of the sound energy, thus keeping it from reflecting back and forth or reverberating longer than is desirable.

In the case of the furnishings for rooms, many new materials are available that will absorb more sound energy than the old standard materials generally used.

Carpets, linoleum and rubber floor coverings, for example, are quieter and more absorptive to sound energy than concrete or terrazzo, and reduce the intensity of the sound energy or noise emitted by walking. They not only cause a less intense sound to be generated by absorbing a larger part of the energy contact from the shoe, but they present more absorption for the reflected sound waves, thus causing sound energy free in the room to die out sooner.

Upholstered furniture, particularly that which is covered with deep pile fabrics such as velours and mohair, curtains, drapes, rugs and special sound absorbing plasters and wall coverings, may now be intelligently combined in a manner to reduce noise.

Walls, partitions and floors themselves, if not properly built, may transmit sound from one room to another in varying degrees, depending upon the type of construction. The ordinary lath and plaster wall on wood studs, for instance, is not sufficient as a deterrent to the passage of sound energy. Cracks and openings around the windows, transoms and doors are responsible for the escape of a large quantity of sound to and from rooms.

Light weight floor construction may readily allow the noise of walking to be heard in rooms below and in some buildings talking may be heard in rooms adjacent. The sounds made from direct impact of objects like the impact of the shoe with the floor when walking are much more difficult to minimize than the less energetic sound waves produced from talking because they cause the floor to vibrate, thus emitting sound energy over a large area and at points remote from the source of the original vibration.

Noise From Mechanical Equipment

As in the case of the transmission of sound through floors, the transmission of sound through walls is accomplished principally by the forced vibration of the walls, that is, the entire rigid partition is forced into vibration by the impact of objects or even by the impact of sound waves against it. The vibrating partition thus becomes a secondary source of sound and radiates it to the adjacent space. From this fact it is reasonable to see, as has been determined experimentally, that the insulating value of a wall depends primarily upon its mass or its inertia, its stiffness and the internal absorbing ability which the wall has for sound waves. Definite relationship between the mass of a wall and its ability to insulate has been worked out.

Undesirable noise may also originate from ventilating equipment, pumps, elevators and other types of mechanical equipment. In the case of ventilating equipment, sound originating at the circulating fans may be distributed through the ventilating ducts to the entire building. Sound absorbing materials in the form of porous fiberboard or felt may be used to line sections of ventilating ducts to prevent the travel of sound waves through them. Also, the fans and motors may be separated from the main ventilating duct by a short duct section of canvas or some similar nonwave-conducting material. In the case of electric motors, pumps and other types of vibrating machinery, the vibration and accompanying noise that they emit can be minimized by mounting them on special vibration-absorbing bases and by enclosing them in rooms that have been soundproofed.

Much research work has been done and is being conducted on the reduction of sound transmission or what is termed the "loss" through various kinds of floor and wall construction. As a result of this work, many important factors have been determined. Although thus far no form of construction has been discovered that is absolutely soundproof and at the same time practicable for school building construction, types of constructions which are practicable to build and which do present much better installations than the old so-called standard types of constructions have been developed.

Treating the Auditorium

Extraneous noise and uncontrolled reverberation are more harmful in the auditorium, perhaps, than in any other room in the school building. Here they tend to defeat the purpose for which the room is intended by reducing articulation and making hearing difficult and tiresome.

Extraneous noises in the auditorium should be reduced to a minimum. A certain amount of reverberation, however, is necessary to sustain and reinforce the voice of the speaker. The problem is to reduce the reverberation to within a satisfactory range since the most generally used materials and furnishings, such as hard plaster walls, wood or concrete floors and plywood chairs, cause in most cases excessive reverberation.

Audience Absorbs Sounds

It is now possible for the acoustical engineer to predetermine, with reasonable accuracy, the period of reverberation that an auditorium will have if he knows definitely the types of materials to be used in the construction of the walls and floors, the area of each type of wall and floor covering, the type of furnishings and seating to be used and the volume of the room. For auditoriums already in use, various types of instruments have been perfected for measuring the period of reverberation. From experience gained from thousands of auditoriums and from various articulation tests, it is now definitely known what the period of reverberation should be for an auditorium of given size to produce the best results for an audience of average size.

A factor, until recently not given due consideration in determining the amount of sound absorption present in an auditorium, is the audience itself. The human being as customarily clad presents a relatively large amount of sound absorption. This accounts for the difference in "sound atmosphere" that we have all experienced between the same auditorium empty and when filled to capacity. Means have been determined to minimize this difference resulting from various sizes of audience. This is accomplished by the use of upholstered chairs so designed that when the chairs are unoccupied they present practically the same amount of sound absorption to the sound waves in the room that an average person presents. The sound-absorbing materials on the chairs are so arranged

that their effects are cancelled when the chairs are occupied, thus keeping the total amount of absorption in the room practically constant regardless of the size of the audience.

The Sound Chamber, Bureau of Standards, Washington, D. C., has carried out extensive researches and investigations on the various phases of sound transmission in buildings and sound absorption of various types of materials and types of seating. In addition to the government researches, various independent manufacturing concerns have carried on work in their own laboratories or in other recognized laboratories throughout the country.

School officials, architects and others interested in combating the noise problem in building will find a fund of information available from these sources. Several of the larger manufacturers maintain a staff of acoustical engineers to assist in design or in helping solve sound problems in buildings already in existence.

The following bibliography will be useful to those who wish to give the problem detailed study.

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A soundproof partition divides the classroom, on one side of which students perform.

Classroom Turns Radio Studio

By SHERMAN P. LAWTON

GOOD evening, ladies and gentlemen. This is the Basement Studio Program which comes to you regularly at this time over this station, bringing you original plays, songs, skits and verses by students of Stephens College. You are listening to the studio trio singing our theme song, The Missouri Waltz."

Thus, once or twice a week begins what is possibly the only regular amateur all-woman broadcast in the world, for the Basement Studio Programs are written, enacted and partly

produced by first and second-year students of Stephens College, Columbia, Mo. Most of the plays have been written by the seventeen and eighteen-year-old girls, and those not written by these amateurs have been adapted by them. Almost all of the verse, some of the musical compositions and all of the sound effects are amateur-created.

The purpose of these broadcasts is recreational, expressional and creational. The real object is to provide a worth while training activity for undergraduate boarding school girls; there is a secondary eye to the general public. But the Basement Studio Program has not failed to gain the interest of the radio audience. The girls have received mail from twenty-three states and one province in Canada, although the station over which they broadcast is on only 500 watts power during the evening hours when the program is heard.

These Basement Studio Programs



Microphone, volume control, phonograph turn table for records, piano, and a variety of sound effects complete the studio set-up.

are the outgrowth of classes in radio speech in the regular curriculum of the school. Originally, the classes grew out of the programs, but now the courses are used as a nuclear base for the public performances.

The classroom is divided into two parts by a soundproof partition; on one side of the partition the student groups perform. A microphone, volume control, phonograph turntable for records (which are never used on the actual broadcasts), piano and a variety of sound effects complete the studio set-up. Walls are draped with heavy cloth to deaden sound, and the floor is well carpeted.

On the other side of the partition the class listens to programs with a view to appreciation and criticism. On this side, too, is a microphone leading to a speaker on the broadcasting side, and through which the director gives instructions during rehearsals.

In the partition itself are double windows with drapes to block out vision during rehearsals, but through which performances may be observed by visitors to the studio. A double door in the partition minimizes the possibility of sound being heard in the audition room, except through the

loud-speaker which is attached to the microphone.

A simple switch throws the programs to the broadcasting station when desired, and a red light operated from the station tells the performers when the program is going on the air.

In the classes play writing, the writing of talks, announcing, advertising, production, sound effects and a variety of other material are studied, in addition to delivery and acting. Performances that prove successful in the classroom are made a part of the regular broadcasts. However, participation in the actual broadcasts is not limited to those taking the class work. Original verses and music, skilled amateur musical performances and similar entertainment not taught in the radio classes are given a place in the actual broadcasts.

One of the great values in the course is the opportunity that each second-year girl has to direct shows of her own which are actually broadcast. Each second-year girl is given a group of first-year students with whom to work. As soon as a girl has her show in shape, she is allowed to include it on the regular broadcasts.

Individual research projects in-

volving studies of audience reactions, technical equipment and voice production are required study.

Although the Basement Studio Programs have been on the air now only three school semesters, some of the girl performers have already found their way into professional radio work, although professional training is not a primary object of the enterprise.

School Custodians Convene

"Where is your certificate of proficiency?" That, according to Roger W. Quinn, retiring president of the National Association of Engineers and Custodians, is the question that will be asked of future school custodians. In his address at the organization's sixth annual convention, held in Evansville, Ind., June 15 to 20, he compared the school janitor of twenty years ago with the present day custodian, and reviewed the history of the association.

The first four days of the program were devoted to an educational program. Lectures on housekeeping and ventilation, with round table discussions and an inspection of manufacturers' displays, took the entire first day. Practical classes in cleaning various kinds of walls, woodwork, china, metal, glass, light fixtures and shades; reconditioning blackboards, and cleaning and retreating floors were conducted. Theory included job analysis, determination of man power, work and salary schedules, advantages and disadvantages of special training in custodial work, summer work programs, and purchasing and budgeting of supplies.

A recommendation for the adoption of a national certificate of proficiency and for the standardization of a training program for school custodians through a course of study to be made available to interested school superintendents and principals was made by the committee on education. John Shepard, Evansville, Ind., was elected president for 1936-1937, and K. P. Grabarkiewicz, Minneapolis, was renamed recording secretary.

"First Aid" for Visual Aids

By JOSEPH V. SULLIVAN

HE steady development of visual instruction programs during the last ten years has brought new responsibilities to school heads, department supervisors and teachers alike. Aside from the obligations involved in adapting this activity to the school program, certain mechanical requirements must be met. Those in charge of the program should possess, for example, some knowledge of the operation and maintenance of the numerous machines and devices, if the work is to achieve a successful culmination. To be more specific, they should know about the care and repair of films, the operation of the projector, the function of the wires and the proper construction of screens.

To secure successful results in the visual instruction program and to ensure longevity to the equipment, certain routine procedure and practices should be strictly adhered to.

Some Rules to Follow

- Do not allow inexperienced operators to practice on the machines unless they are carefully supervised.
- 2. Oil all equipment frequently and carefully, a few drops at a time. Excess oil should be wiped off immediately. Oil should never remain on any surface over which the film passes. Use the special oil sold by the manufacturer of the equipment, for ordinary machine oil may lose its body when heated. 3. Clean all parts of the machine through which the film passes with a bone scraper. Do not use metal. Wipe these parts with a piece of cotton dampened with carbon tetrachloride.
- 4. Clean reflector, bulb, condensers and objective lens with a soft cloth or chamois.

Sound films present additional difficulties and problems of operation and repair. The sound track is very sensitive to dirt. Therefore it is essential to keep all parts exceptionally clean. The tubes should be checked frequently for maximum efficiency and the sound head and speaker should be kept as free from dust as possible and should be covered when not in use.

Care and Repair of Films

Viewing all the problems presented, the greatest difficulty seems to lie in the care and repair of films. In some cities a technician is employed to perform this service, but in most school systems the task falls on the teacher. Valuable assistance is often rendered by high school pupils who are particularly interested in this phase of mechanics. This is true in Macomb's Junior High School, New York City, where, under the supervision of the visual instruction head, boys showing any aptitude at all are not only trained to care for the films but to operate the machines and see that the entire equipment functions properly at all times.

When films are returned to the exchange for examination and repair, the condition of the container should be carefully checked, the name of the film should be placed on the container, and the film should be inspected and the humidor moistened if necessary.

If these four steps are followed implicitly, excellent results should follow:

1. Examine containers of films to see that the cover fits snugly and opens easily. Many teachers are careless about interchanging covers of film cans. If the cover is too loose, the humidor is valueless; if it is too tight, some tool such as a screw driver

is used to open the container. This damages the container and possibly the enclosed reel.

2. Print the name and the reel number on the outside of the container. It is well to consider some of the methods now in common use, with their advantages and disadvantages:

Adhesive tape printed with India ink or typewritten is a common method. A special tape, coated with gauze, is necessary to facilitate handling. The disadvantages of this method is that the tape becomes soiled, and it has a tendency to pull away from the can. Paper labels pasted under a cover of Scotch tape are also used. In this case also the tape pulls away from the can, but replacement is easier and cheaper. India ink is sometimes used for writing on the container, but the ink gradually wears off. The most permanent method of marking cans is by stamping on the name with a metal die. The disadvantage of this method is that the container cannot be used for any other film as the name is embossed in the metal. A fifth method consists of the name being embossed on the metal with an electric stylus pencil. The name is thus burned into the metal, and the container cannot be used for other films.

Where Damage First Occurs

3. When a film is taken out of the container for inspection, repair and preparation for reshipment, caution should be exercised in many ways. First, examine the length of the leader and the trailer. If a film has sufficient leader and trailer it will never become scorched or burned, provided, of course, that the projector

is in good mechanical condition. Most damage to films occurs in the initial caption. This is caused either by the lack of leader or by the ignorance of the operator who does not use the leader for threading purposes. The leader is attached to take the abuse of handling. Repeated splicing of the initial caption will cause it to disappear with the accompanying expense of replacement. The leader should be at least 3 feet long and the trailer 2 feet.

The name of the film, reel number and "Start" should be written on the leader of every film; the name of film, reel number and "End" should appear on the trailer of every film. India ink or show card ink is best for this purpose. Be sure the ink is thoroughly dry before winding the film.

The take-up reel should be in perfect condition. The slot for the film should be cleaned of any broken pieces of film. It is most annoying to use reels that have small particles of film in this slot. If the film is slightly bent, try to straighten it by inserting a piece of wood of the proper thickness between the edges of the reel and by tapping lightly with a metal hammer. If the reel is beyond repair, discard it. In rewinding films, the apparatus should be perfectly aligned. If this condition does not exist, the film will be wound loosely and may possibly be damaged by rubbing against the edges of the reel.

Cleaning the Film

In rewinding the film, a light should shine directly on the film. The examiner allows the film to pass through his fingers as he cautiously checks for oil on the film, dirt accumulations, burns and scorches, improper splices made on inferior apparatus or by careless operators, worn or broken sprocket holes, and "rain" or streak marks. There are many film cleaners on the market. Practically all of them use carbon tetrachloride as their base.

Great care should be taken during the cleaning process, and the following steps religiously followed. Set the rewind spools about 6 feet apart. Saturate thoroughly a large piece of absorbent cotton (use no other type of material, as harsh cloth scratches film). Run the film through the cotton and turn the handle very slowly so as to ensure complete evaporation of the liquid before the film reaches the take-up reel. Replace the cotton frequently so that the dirt accumulations do not scratch the film.

All burns and scorches should be taken out by splicing the film. Unsatisfactory splices should be opened and respliced. Poor splicing causes much of the inconvenience in using projectors. "Rain" marks may be caused by a dirty projector and in this case are easily removed. However, if they are the result of wear, no remedy will remove them.

Splicing the Film

To splice a film properly, the following precautions should be taken. A good, heavy duty, professional splicer should be used. Clamps, edges and blades should be properly aligned; cutting edges should be exceptionally sharp, and the splicer should be immaculately clean, for accumulations of emulsion and cement interfere with successful results. The film should be carefully inserted into the splicer. Careless handling may cause enlarged sprocket holes. The surface to be scraped should be dampened, especially on old films. Do not allow any excess water on the film, for water damages the emulsion. Scraping should be done slowly and carefully so as to prevent damage to the sprocket holes. All particles of emulsion should be brushed off and the film should be wiped thoroughly dry. Cement should be applied quickly and sparingly, and the clamps closed immediately. Film cement dries quickly. Any loss of time in this operation might cause the film to come apart.

Unsuccessful splicing may be due (1) to the splicer being out of adjustment through insufficient pressure put on film (to remedy this, check all parts of splicer); (2) to the film not being thoroughly dry, (the remedy is

to start over again); (3) to cement being placed on the emulsion side of the film (turn the film over and scrape the emulsion), and (4) to the film cement being too thin. If the last is the case, dissolve a small quantity of emulsion in the cement to bring it up to the proper consistency.

After a few seconds the film should be carefully removed from the splicer by inserting a knife under it and cleaned of all excess cement. The film should then be checked for a proper alignment of frames, sequence of action and sequence of captions. All manufacturers of splicing equipment have detailed instructions on the use of their own products. Before using a splicer, send to the manufacturer for such information. Do not experiment with good film. Use discarded film.

After the film has been thoroughly inspected and repaired during the rewinding process, it should be held tight by a metal collar, which will keep the film from unraveling in the container.

4. Before the film is inserted in the container, the humidor pad should be carefully checked. Dryness ruins films. A few drops of glycerine spread with water will keep this pad moistened. Again, one must be careful of excess water near films. It is particularly important that these blotters be kept damp during the months when artificial heating is necessary. Never leave films exposed to air unnecessarily.

Operating the Projector

To operate a projector successfully, the person in charge should know the functions of its most important parts—upper reel, upper sprocket, intermittent movement, intermittent claws, aperture, tension shoes, tension spring, time shutter, fire shutter, lower sprocket, take-up, framing device, speed control, motion picture lens, condensers, reflector and rewind.

To thread an American made 16-mm. projector, it is advisable to consider the following suggestions: (1) Put the film on the upper reel, upside down and the emulsion side

away from the lamphouse ("dupes" excepted). The film should come off the outside of the spool. (2) Handle the leader of the film only. The film proper should not be touched by the operator. Many operators unravel the leader until the film is reached and then thread the machine with the (3) Check the sprockets through the sprocket holes. Entire reels have been destroyed through the carelessness of operators during this part of the operation. (4) Gauge the proper size of the upper and lower loops. Small loops cause trouble and large loops hit the spools and may cause damage to the film. (5) Turn the machine by hand, if possible, to ensure proper threading. If it is not possible to turn by hand, turn the switch on for a few seconds. Watch the lower loop especially when testing. If it disappears look for trouble. Check the sprocket holes.

Once assured that the projector is threaded properly, the next step is to arrange for lights for the showing of the films.

In running the machine it is wise to observe the following rules:

- 1. Start the motor at slow in order to give time to focus the motion picture lens and to adjust the framing device.
- 2. Adjust the speed control until the speed has reached 16 frames per second. If the machine does not indicate this speed, one should run the film just fast enough to eliminate the flicker and not so fast that the image jumps all over the screen.
- 3. Do not use films for "stills." (Use lantern slides). Much damage can be done by holding a film for a "still."
- 4. Allow the film to complete its journey to the take-up reel before the motor is turned off. Otherwise the trailer is left in the machine and it may become damaged when it is removed.
- 5. If the film breaks on the projector, use Scotch tape or adhesive tape for a temporary splice.

If the film is to be used again, it should be rewound immediately. Although many machines permit re-

winding by motor, it is not advisable to use the motor unless the rewind is independent of the mechanism of the projector.

One can readily see the excessive wear to a projector if all its parts are pressed into service during the rewinding process. Do not rewind the film when returning it to an exchange as films so returned make double work for the inspection department. It is courteous to report unused films and to make reports on the condition of the films when they are being returned.

If the projector is in good mechanical condition, if the film lacks the

A little knowledge is not a dangerous thing when it comes to operating and caring for visual aid equipment. But if your "little knowledge" stops just short of many emergencies you will find helpful these rules by Mr. Sullivan, chairman of visual instruction at a New York junior high school.

usual sources of annoyance, and if the operator is experienced, excellent projection results should ensue. However, the unexpected does occasionally happen. Listed below are the major disturbances together with remedial measures:

- Pictures and letters appearing upside down—the film should be rewound. It is at the end.
- 2. Letters read backwards, pictures are correct—the film should be turned over. Someone was careless in rewinding.
- 3. The picture sways on the screen—examine the legs of table noting whether all legs touch the floor. Steady the table.
- The picture jumps on the screen
 —the machine is running too fast.

Turn the speed control toward "Slow."

- 5. The picture flickers on the screen—the machine is running too slowly. Turn the speed control toward "Fast."
- 6. The picture has white streaks running up and down or has the appearance of a "screen ghost"—"rain" streaks may be due to dirty or damaged film. Clean the film. "Screen ghost" is due to a lack of synchronization between the time shutter and the intermittent movement. When this occurs with a 16-mm. projector, it is advisable to return the machine to the service department.
- 7. The picture has uneven edges on the screen—particles of dirt are attached to the aperture plate. Brush with a stiff brush. Do not use metal.
- 8. The picture has an uneven spread of light on the screen-the lamp is out of adjustment. To make proper adjustments, loosen the screw in the socket clamping ring and hold the bulb so that the filament of the bulb is parallel to the face of the reflector and to the plane of the condensing lenses. The supporting wires for the filament should face the reflector. When properly aligned, the plane of the reflector, the plane of the filament and the plane of the condensers should be parallel to one another. Furthermore, the center of the reflector, the middle of the filament and the center of condensers should form a straight line, which should be perpendicular to the planes of these three essential parts. When thus aligned, tighten the screw.
- The picture fades in and out of focus—the film is dry and old. No remedy suggested.
- 10. The picture seems wider at the bottom than at the top, or vice versa—this is known as the "keystone" effect. It is the result of the rays of light hitting the screen at an angle other than 90 degrees. This is caused by setting the machine at a great distance above or below the level of the screen. To remedy this situation, mask the screen as indicated later in "Specification for Screens."
 - 11. The picture gets out of frame

—a careless splice has been made. Adjust the framing device.

12. The picture on screen is yellowish—the bulb may be burning out or the machine may be too far from the screen for the wattage of the bulb. Replace the bulb. If there is no improvement, move the machine nearer to the screen.

13. The definition of the focus varies — moving picture lens vibrates. Check the lock-screw on the lens to ensure tightness. Excessive speed causes vibration.

14. The upper loop disappears—this is caused by poor splicing or by the intermittent movement being out of time. If it happens with a few films, check the films. If it happens continuously, have the machine serviced

15. The lower loop disappears — same as "14." The take-up is too tight. Adjust it if possible. If not, have the machine serviced.

16. The take-up reel winds too slowly and the film piles up—the take-up is either too loose or slips. Wipe all the oil and dirt off the pulley and the belt. If it still slips the belt has stretched and should be replaced. Oil on the axle will help.

17. The motor runs but the light goes out—the bulb is burned out. Replace it.

18. The bulb lights but the motor does not run—there is trouble in the motor. Check and replace the brushes, if necessary. Check all connections. If impossible to locate the trouble, send the machine to be serviced.

The speed of the motor varies
 —check the brushes. Clean and replace if necessary.

20. There is a sudden cutting of the current—the wire connections may have become disconnected or the fuse may have blown out. Check with a fuse tester for fuses. Check with a wire tester for wire trouble. If the fuse blew out, check for the cause. There may be a short circuit in the wires or in the machine.

"Penny wise, pound foolish" might readily be applied to organizations purchasing expensive equipment and inferior accessories such as wire and switch connections. The best equipment will not function without "juice." Cheap wires, which usually break in the middle of a picture, are a constant source of annoyance to the operators of the equipment.

To provide adequate and satisfactory service, the following tools should be included in the repair kit: heavy duty knife, small screw driver, large screw driver, pliers, friction tape, electric soldering iron, terminals, test bulb, bell set and fuse tester.

Instruction on the proper method of connecting wires should not be necessary, but it is recommended that terminals, which are readily purchased at radio supply stores, should always be soldered to the ends of the wires.

To prevent any interruptions in current, a careful check of all wires should frequently be made with a bell tester. This tester consists of a bell and two dry cells. In using this set, the wires of opposite polarity are tested for a possible short and the wires of the same polarity tested for a complete circuit. When several types of outlets are used in the same building, there should be an abundance of extension cords for each type.

If the switch is turned on and nothing happens, the trouble may be in the current (fuses), wire, connections, the machine or the bulb.

To locate the trouble the following procedure is recommended: Test the outlet for current. If there is no current, examine and test the fuse. Examine all extension cords with a bell set for broken wire. Examine all connections to ensure no break in the current. Take the bulb out of the machine and test it in a testing socket. Never test it with the base up. Examine connections and plugs on the machine.

Specifications for Screens

Screens seem to be the orphans of visual instruction equipment. Like wires they are seldom carefully selected. Herewith is a list of specifications considered necessary for every classroom screen.

1. It should have a good reflecting surface.

It should reflect the rays evenly to all parts of the room.

3. It should stand or hang so as to be just above the heads of the children sitting on the front row.

4. It should have a stiff roller spring. The roller should fit tightly into grooves made of the hardest metal.

These grooves should be welded or screwed to the frame.

 The frame should be held together with sufficient screws to prevent the roller from slipping out of the grooves.

7. On standing screens, no part of the stand should touch the screen when it is folded. All rivets should be made of the finest and hardest steel.

8. On standing screens, all adjustments should be made by some type of spring device. Screws should not be used.

9. On all screens the white reflecting surface should be bordered by a wide margin of black. This is known as masking the screen. It helps to give a better picture, a clearer outline and to balance any keystone effects.

10. The slab or the part of the screen extending outside of the cover should be doubly reenforced by a material that will stand up under abuse and long usage. This part of the screen receives the most wear and tear.

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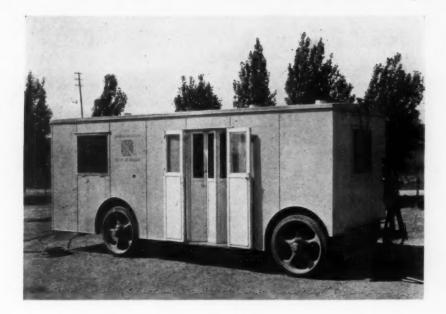
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Traveling the Road to Health

By SVEN LOKRANTZ, M.D.

O BRING dental and medical aid to school children in outlying districts of Los Angeles, the city school system has established a unique type of health service in a traveling "healthmobile," which brings efficient, prompt and often free service to the schoolroom door.

Two of these traveling health units are in service, traversing thousands of miles yearly. Conceived by Dr. Sven Lokrantz, the director of health service of the city schools, the first healthmobile was put into service more than ten years ago. Since that time another unit has been added. A duplicate of the ambulatory clinic was constructed for the use of the children in Norrland, Sweden.

The traveling healthmobiles have been found invaluable in caring for indigent and physically defective school children in districts in which it has not been practicable or economical to establish permanent clinics. The healthmobile is adapted for truck or trailer chassis although the present models are hauled by truck to the various schools, where they are stationed for short periods. The healthmobile consists of an especially designed body built on a truck chassis. In this body, space is provided for dental work and for nose and throat treatments. In a corridor-like arrangement eyes are examined, vision is tested, and glasses are fitted.

As the Los Angeles elementary school district covers an area of 696 square miles, the mileage per year is considerable. Units are moved to various schools following a definite schedule. Camp is established at each school or group of schools to be served and the work is finished at each place as quickly as possible. The length of time spent at each camp depends upon the number of cases and location, usually from two to six weeks at the most.

Camp is established near an elementary school and the healthmobile opens its doors for service. This is one of two traveling health units built and maintained by the city schools of Los Angeles.



If social service discloses that patients are unable to pay even the small charge of 25 cents a visit, the service is rendered free of charge.

The cost of a single unit is approximately \$4,000, which includes the complete equipment and incidentals. Operative costs, covering salaries of dentist, oculist, dental assistant, transportation and other incidentals average about \$3,500 annually. Constructed of well seasoned oak, each unit is equipped with double floors covered with heavy battleship linoleum. Roof and side walls are insulated to prevent any possible shifting or sagging.

Each healthmobile is provided with a dental chair, eye clinic chair, instrument case, swinging instrument rack, eye charts, a dental motor, built-in shelves, built-in desk, hose, set of eye lenses, floor covering and other accessories. Dental work constitutes the major portion of service.

Better Plant Practices •

Cleaning Painted Concrete Floors

"Everyone who has had experience with painted concrete floors," states O. L. Fouts, writing in the Model Custodian, "knows that where traffic is heavy a black scum or film forms on the floor and clings to it most tenaciously, making it difficult to mop or clean that area in a manner that will make it really

look clean and presentable.

"The way I do this is as follows: take a mop pail half-full of water, treated with soluble powder (water softener) and pine oil solution, about 1 tablespoonful of each per gallon. Then fill an 8-quart sprinkler with water, treated the same way, and proceed as follows: first, sprinkle the floor thoroughly until wet, then dip a mop into the pail, wring it out well and wipe the floor dry.

"The result should be a perfectly clean surface, having the appearance of a newly painted floor. Where the floor is extremely dirty, the surface may need a second light sprinkle of water, but this will seldom have to be done. I find the use of the sprinkler saves much time and hard labor. It saves using scouring powder to remove the film, as has heretofore been thought necessary, and is also a time saver when used on tile and terrazzo

floors."

Small District Meets Insurance Problem

What about fire insurance in the school system not sufficiently large to permit its own individual type of setup? Aberdeen, S. D., is an example, according to Frank E. Wyttenbach, business manager and clerk of the public schools. Insurance reserve is not permitted because of state law, nor is

state insurance provided.

"Our insurance is all written on the 80 per cent co-insurance basis with full supplemental coverage," Mr. Wyttenbach explains. "It may be of interest to know that within the last forty-five days we have cancelled and rewritten all of our insurance to take advantage of an average 25 per cent reduction in rates granted by the Fire Underwriters' Inspection Bureau as a result of an experience rating on our type of insurance

"We insure only in old line stock companies. These companies must all be approved through the business office.

The total coverage for our ten buildings and contents is distributed among the legitimate insurance agencies in our town in proportion to their size and service ability. This percentage is determined by the five members of our board of education and is the percentage of actual premiums paid rather than total volume of coverage on the foregoing risks.

"This plan gives to each agent a bit of coverage on 1-A, 3-A, and combined 1-A-3-A risks. Our total coverage is so arranged that approximately onefifth of the insurance expires each year and as each renewal period arrives, the expiring insurance is rewritten for a period of five years. This method is used so that each fiscal year will bear its proportionate share of insurance

Clean Marble Halls Worth Singing About

There are two types of marble cleansers - the scouring type and the nonscouring type. Dr. Oliver Bowles in his book, "The Stone Industries," explains that the scouring type contains abrasive powder, usually a volcanic ash, and that the nonscouring type consists of soap or alkali salts.

This authority advises against employment of the scouring type for polished surfaces. Soapstone and talc grits will not hurt polished marble and he suggests a preparation of 90 per cent soapstone and 10 per cent soap for marble surfaces, including polished surfaces. Injury to marble work may result from the use of detergents, such as sodium carbonate, sodium bicarbonate or trisodium phosphate used in nonscouring compounds.

Authorities such as Doctor Bowles are of the opinion that polished marble should be cleaned once a week and most certainly once a month. Dirt, grease and dust, if not removed, will result in a film that will eventually cause discoloration. Emphasis is placed on the fact, however, that the cleansing agent should contain no grease, lye or other corrosive

To quote from a recent article in Stone: "The cleansing agent should rinse off freely without leaving a greasy or slippery film to catch more dust particles in the air. Polished marble surfaces should be wiped dry after washing and then rubbed vigorously with a

dry soft woolen cloth, white cotton waste or chamois skin. This rubbing prevents streaks that might be left from the water used in rinsing off the cleans-

'Never, and this admonition should be spelled with capital letters-NEVER -use acids on marble. Soaps, soft soaps, soap powders and scouring bricks are also on the taboo list. Usual soaps and caustics contain ingredients that do not rinse off and they frequently leave films that act as binders for dirt and dust. Any harsh abrasive will destroy the polish.

"Frequently stains work through a marble slab from the back to the front and contractors should guard against foreign substances at the back at the time of the installation. Attention of building superintendents is called to the use of soaps and other cleansers that will injure, cause discoloration and act as a menace to life and limb by causing slippery films on stair treads and floors. Neither are all kinds of sawdust good for marble floors. White pine sawdust passes all tests. Dust from oak and some other woods should be avoided, as well as oiled mops, as they produce

"Oil stains are about the only ones that cannot be removed from marble surfaces by the use of the simple preparation, made from chloride of lime and washing soda, known as javelle water. This preparation can be obtained from drug stores and can be used frequently and unsparingly.

'When dirt collects and becomes hardened on a marble surface it can be removed with javelle water. Iron rust does not give way to this treatment. however, and high test gasoline can be used on cotton waste or a blotter, pressed down and allowed to remain until the stain is gone."

AN INVITATION

Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.



Armstrong's Linoleum Floor greets visitors at the Texas Centennial Administration Building. Field is No. 29
Cadet Blue; map and letters, No. 23 White; star and inner strip, No. 41 Orange; outer strip, No. 22 Gray.

FLOORS of Armstrong's Linoleum are a definite aid to students. They make classrooms more cheerful. They lessen noise. They encourage study.

And these floors discourage high maintenance bills—as school boards everywhere have discovered. Their cost is low—both to install and maintain. They stand hard wear. Their bright, smart colors run through to the back—can't be worn off by scuffling feet. A daily sweeping and an occasional washing and waxing keep them as clean, sparkling, and wear-resistant as the day they were installed.

Armstrong also offers the only complete line of resilient tiles for schools. Linotile,

an exclusive Armstrong product, is a long-wearing tile, ideal for corridors and halls where traffic is heavy. Accotile is an inexpensive, moisture-resistant tile for gyms or basements where concrete floors are in contact with the ground. Rubber Tile is a specially-reinforced tile with a decorative high finish, and Cork Tile is a beautiful floor for libraries, study rooms, or offices where utmost quiet is desired.

If you'd like more information about these attractive floors, write today on your letterhead for color-illustrated "Better Floors." Armstrong Cork Products Co., Building Materials Div., 1213 State Street, Lancaster, Pa.



Information Desk in the Administration Building, Texas Centennial Exposition. Floor is Armstrong's Linoleum with field of No. 29 Cadet Blue, inner border of No. 22 Dark Gray, and No. 23 White strips.

ARMSTRONG'S Linoleum and RESILIENT TILE FLOORS

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In a cottage similar to their own homes these girls learn how to cook and to care for a house and children.

School Cottage Dressed in Home Style

OME economics is not a new subject in the curriculum of the Crystal City High School, but two years ago last fall it was organized into a vocational department which stresses other phases of homemaking as well as the courses on foods and clothing that were formerly taught.

To accomplish this reorganization, it was necessary to alter the physical plant and to add equipment with a view to making all phases of the work equally interesting and practical. The courses offered now are so popular with the homes and pupils of the community that there is a maximum number in each class and a waiting list a year in advance.

The department is housed in a five-

room cottage across the street from the high school building. This cottage originally was a company house similar to many homes in the community. Some alterations were necessary, but the big objective in renovation was that there should be, with one exception, no change that would make the building less like the average home in the community. This exception was in the large laboratory built on the rear of the cottage.

A trip through the house indicates how the work in this department is able to exert the influence it does and to form such a vital part of community life. The large front room and the smaller room opening into it with a large archway give the impression of beauty, restfulness and domesticBy HAZEL HATCHER

The set-up of a home-making department in a town of 4,500 is described by Miss Hatcher, instructor of vocational home economics in the Crystal City High School. Located thirty miles south of St. Louis, Crystal City, Mo., is an industrial community of mixed population whose chief interest centers about the fabrication of glass.

MAPAN



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ARE PATTERNED
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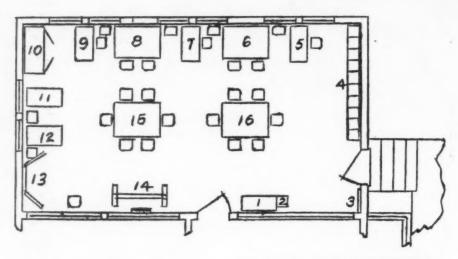


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Floor plan of the clothing laboratory showing arrangement of equipment. The room may also be used as a second dining room or banquet room. Equipment is placed as follows: (1) case for magazines; (2) pinking machine; (3) door mat; (4) lockers; (5, 7, 9, 11, 12) sewing machines; (6, 8, 15, 16) adjustable tables with chairs; (10) book case; (13) triple mirror; (14) blackboard.



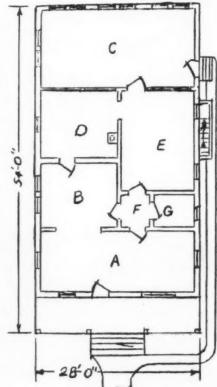
ity. It is in this setting that the girls, grouped comfortably and made to feel wholly at ease, discuss personal, family and community problems and try to formulate ideas and to develop ideals that should enable them to lead happier and better lives. No average schoolroom setting could possibly make the family relationship phase come to life as it does here.

In the same room the applied art class studies art principles and makes definite applications. Every piece of furniture and every picture were chosen to illustrate some principle in art. The house furnishing group also has class in this setting except when it makes field trips to other homes in the community. This group has opportunity to select small pieces of furniture, accessories and material for maintenance. They gain much experi-

ence in shifting the furniture to make different rooms as these rooms are needed. The two rooms furnish living room, dining room, combination living-dining room, bedroom, den and child's room. The furniture, which is hard maple, was purchased with this need in view.

During the home management unit this part of the house is used for entertainment projects. Each group consisting of two to five girls plans and gives a simple home entertainment to which outside guests are invited. Also opportunity is given here for actual house care, which is a branch of home management.

Local parent-teacher groups hold meetings in this living room on an average of once a week during the school year. Last year more than 500 adults visited the department.





Exterior of cottage and floor plan (above). A is the living room, which is used for family relations, applied art, house planning and furnishing, house care and problems of entertaining; B, the den, used for living room, home nursing, child's room, conference room and extension of living room; C, laboratory; D, kitchen—gas and electric units; E, kitchen—oil stove units; F, hall, and G, bath.

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On occasion the space shown above is used as living room, dining room, combination living-dining room, bedroom and child's room.

The smaller adjoining room serves four purposes. As a den it is ideal for home project conferences or other more personal ones. The transforma-

tion from a den into a bedroom for home nursing is easily made. The day bed is raised on to wooden blocks to make it the correct height. The chest desk, a chair, a screen and the built-in medicine cabinet in the bathroom furnish the laboratory equipment needed for work in this unit.

During the foods unit the gatelegged table is opened. Four ladder back chairs, the chest desk (which makes also a small buffet) and several other pieces of small furniture make a dining room that is suitable for any family of small size.

Each year in the fall the class in child care and training conducts a two to three-week nursery school for preschool brothers, sisters and little friends. All adult furniture is moved out of the room and it becomes the delight of three-year-olds. All equipment for this room and also the back-yard playground for preschool children was made from odds and ends by the girls with a little help from the janitor. The only cost was for paint,

Opening into this room and into a small hall are two kitchens containing four complete units and storage space for applied science and cleaning equipment. Separating these kitchens from the laboratory built on at the back are plate glass partitions similar to those in commercial departments.

The large laboratory room is a typical clothing laboratory and contains individual lockers, tables and chairs, sewing machines, triple mirror, pinking machine, book case, magazine shelves and movable blackboard. Since it opens off the kitchens the tables may be used to make a second dining room if needed. In fact it is the banquet room of the school for all banquets for fifty persons or less. Also it is the applied science classroom.

Continuing to the basement an airconditioning appliance is discovered attached to the furnace; also space for storing canned food and considerable other storage space. With the exception of a laundry unit yet to be installed either in the larger kitchen or in the basement and some landscaping work in the yard, the cottage seems to be almost ideal for vocational home economics that is to be a vital part of community life.



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SAYS DR. DAFOE: "At the time of the birth of the Dionne Quintuplets, and for some time afterward, they were bathed in Olive Oil... When the time arrived for soap and water baths, we selected Palmolive Soap exclusively for daily use in bathing these famous babies."



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Refrigeration in Modern Terms

By LULU GRAVES

OT so long ago refrigeration for food products meant keeping them cold enough to delay spoilage; today, it means maintaining a temperature best suited to the requirements of various kinds of foods, together with sufficient air circulation and degree of relative humidity to keep them as near their natural state as possible.

Modern refrigerators are designed to meet all of these needs. They provide improved insulation, devices for automatic control of temperatures and control of air circulation. Automatic defrosting of coils is included in the installation, and cabinets are designed with thought to sanitation and easy cleaning. Their effectiveness and cost of operation are determined largely by the manner of their installation and the way they are used.

Good construction means good refrigeration at low cost. This involves adequate insulation to lower heat transmission, tightly fitted locks and doors, seamless linings and modern engineering throughout. Lowered operating costs will in a comparatively short time counteract the seemingly high installation cost.

Temperature control protects foods from spoilage resulting from high

In this, the second of two articles on modern cafeteria equipment, Miss Graves emphasizes the importance of maintaining a temperature best suited to the requirements of various foods and the economies which result from foods well preserved.

temperatures and from loss that comes from a freezing temperature, which ruins for table use most vegetables, fruits and milk. A temperature of from 40° to 45° F. has been found the most satisfactory for general purposes.

Some practices which raise the temperature of the refrigerator and increase the consumption of current are: opening the doors with unnecessary frequency, leaving the doors open or unlatched, holding the doors open while discussing some points of procedure with a fellow worker, and putting cooked foods into the icebox before they are sufficiently cooled. When coils are not automatically defrosted attention should be given to clearing them before their efficiency is impaired by a heavy layer of frost. Keeping the cabinet colder than necessary is more than an extravagant use of current; it causes deterioration in flavor and appearance of delicate, perishable fruits and vegetables.

Good refrigeration implies control of humidity, air circulation and ventilation as well as of temperature. Air contains varying amounts of water. With a low moisture content it is dry, a high moisture content makes it humid, and when it contains all of the moisture it is capable of holding it is saturated. Therefore, saturated air has a relative humidity of 100 per cent. When air at a given temperature contains only half as much moisture as it is capable of holding it has a relative humidity of 50 per cent. Relative humidity is not constant because it is affected in many ways, e.g., air entering the cabinet chamber when the doors are open.

The degree of humidity needed in a refrigerator depends upon the circulation of air; the more rapid the air circulation the higher the degree

of humidity required. Sluggish air movement will not remove moisture from surfaces. Air must circulate freely throughout the box if best results are to be had. Circulation around cans of milk, egg cases, crates of vegetables and fruits is better if they are placed so that they do not touch one another or are not against a wall. Setting them on slatted floor mats also helps. All shelves should be slatted and never covered with paper or strips of pasteboard, as this interferes with air currents. Generally speaking, meats, poultry, dairy products and the sturdier fruits require medium circulation; vegetables need a faster movement.

A relative humidity of approximately 85 per cent is a protection against shrinkage and spoilage of most foods for the length of time they are customarily kept in a school lunchroom. When not mechanically controlled, placing a shallow pan of water in each compartment helps to prevent the air from becoming too dry. This is of particular advantage when foods are kept over the week end.

Vegetables and fruits have a high percentage of water and they wither rapidly in a dry atmosphere. High humidity and low temperature effectively delay wilting. On the other hand, in too moist atmosphere droplets of water may accumulate on the surface of foods and mold growth or rot may occur.

Fresh meats require somewhat drier air than vegetables, while cured meats and hard cheeses may be kept for a reasonable period at a humidity as low as 45 to 50 per cent. If meat is stored for long in too damp an atmosphere "sweating" or "sliming" will result. Sweating refers to condensation of moisture from the air





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on the cold surface of the meat; sliming is caused by meat juices collecting on the surface as meat thaws.

Cured meats call for refrigeration but they should not be kept in contact with fresh meats as the chemicals in cured meats cause discoloration in the fresh,

The newer systems of ventilation prevent the intermingling of odors. When this is not provided, thought must be given to preventing interchange of flavors and similar unpleasant effects. Butter, cream, eggs and other bland foods readily absorb strong odors, which spoil their characteristically mild flavors. Fish, strong flavored vegetables, melons and matured cheese should be stored where they will not contaminate other foods. Storing the offending products near the warm air flue helps in removing the odors from the air as it passes over the cooling coil.

Frozen eggs should be kept in airtight cans until ready for immediate use. A low temperature that chills an egg thins both yolk and white, giving it the appearance, though not the taste, of a storage egg.

In milk kept at a temperature of 45° F. and cared for with strict cleanliness the bacterial count does not become unduly large. Pasteurized milk is safe milk but pasteurization is not a safeguard against further contamination. Milk may have a good flavor and not sour yet have a bacterial count much higher than the legal number.

Cream and butter should be given the same care as milk and for the same reasons; also cream cheese. Grated cheese should not be kept in a refrigerator because it is dehydrated and it may absorb moisture, making it lumpy.

Fish and ice cream require temperatures below freezing, but there is no question of humidity, since they are packed in ice.

Perishable foods are becoming increasingly popular, and fruits, vegetables, milk and eggs are our protective foods, two reasons why adequate refrigeration is becoming necessary. The custom of shipping some products, notably melons and tomatoes, before they reach maturity is gradually being discontinued. Experience has recently shown that fruits and vegetables tree or vine ripened and precooled keep well in transit. Waxing perishable foods is an even later practice among some shippers. This

promise of having fully ripened products in the markets of the near future makes correct methods of preservation all the more imperative.

Food well preserved reduces waste to a minimum. Not only is spoilage prevented but, because of being more appetizing, there are fewer leftovers.

Recipes for "Best Seller" Dishes

By HELEN HOBSON

The following are recipes for some of the more popular dishes served in the lunchroom of Lincoln High School, Cleveland. Others will follow.

CHEESE FONDUE

- 3 quarts scalded milk
- 3 quarts soft bread crumbs
- 3 pounds cheese, grated
- ½ pound butter, melted
- 2 tablespoons salt
- 2½ dozen eggs

Mix the first five ingredients. Add yolks of eggs beaten until lemon colored. Fold in beaten whites of eggs. Pour into buttered baking dish and bake thirty minutes in a moderate oven. Makes 60 servings of ½ cup each. Sells for 8c.

ESCALLOPED TOMATOES

- 6 quarts canned tomatoes
- 2 cups melted butter
- 3 tablespoons salt
- 3 quarts stale bread crumbs (not dried)
- 1 cup sugar
- 1 teaspoon pepper

Mix bread crumbs with butter and put a layer in the bottom of two buttered dripping pans. Pour the remaining ingredients, which have been mixed, on the crumbs. Then add the rest of the crumbs. Bake in a moderate oven about an hour, being careful not to let the crumbs burn. Makes 45 servings of ½ cup each. Sells for 5c.

The combination plate of cheese fondue and escalloped tomatoes sells for 12c

HAM AND VEAL LOAF

- 16 pounds ground ham, uncooked
- 8 pounds ground veal, uncooked
- 3 pounds bread crumbs (dry)
- 11/2 dozen eggs
 - 4 quarts milk
 - 1 teaspoon pepper-no salt

Mix as for beef loaf. Pack in bread tins and bake one hour and fifteen minutes in moderate oven. Makes 204 servings of 17 loaves; serving, 1/12 loaf each. Sells for 10c.

GINGERBREAD

- 3 pounds sugar
- 3 quarts molasses
- 21/4 pounds shortening
- 3 quarts boiling water
- 4 tablespoons ginger
- 4 tablespoons cinnamon
- 2 tablespoons cloves
- 1 tablespoon salt
- 7½ pounds flour
- 2 dozen eggs
- 8 tablespoons soda

Cream the shortening, sugar and molasses, and add beaten eggs. Alternate hot water and dry ingredients. Bake in moderate oven (350° F.) for from twenty-five to thirty minutes. Makes 189 servings, 3 by 3 by $1\frac{1}{2}$ inches. Sells for 5c; with hard sauce 7c.

HARD SAUCE FOR GINGERBREAD

- 2 pounds butter
- 5 pounds powdered sugar
- 3 orange rinds (grated)
- 3 oranges, juice
- 3 lemons, juice

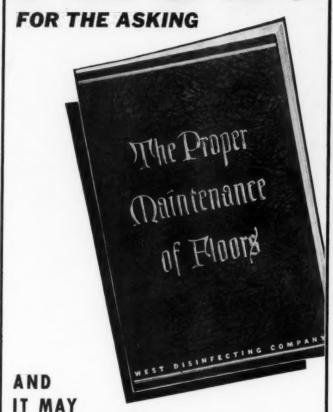
Cream the butter, add alternately sugar and fruit juices. Makes 120 servings of 2 tablespoons each.

CINNAMON COFFEE CAKE

- 1 pound 5 ounces butter
- 4½ pounds sugar
- 11/2 quarts milk
- 4½ pounds flour
- 41/2 ounces baking powder
- 1½ ounces salt
 - 1 dozen eggs

Top with one tablespoon of cinnamon and two cups of sugar. Cream the butter and sugar. Add the yolks beaten, and then add the sifted dry ingredients and milk alternately, followed by the beaten whites. Sprinkle with cinnamon and sugar. Bake thirty-five minutes in moderate oven (350° F.). Makes 105 servings, 3 by 3 by 1½ inches each. Sells for 5c.

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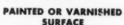
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NEWS IN REVIEW

Brighter Times

Private schools throughout the country expect enrollments this fall to be much larger than last year. More than 55 per cent of such schools expect full enrollment. This means thousands more pupils than a year ago.

Summer camps this year showed almost a 15 per cent increase in enrollments over last. These two indications of improved business conditions are announced by N. W. Ayer & Son, Inc., as a result of a midsummer census of private schools and summer camps.

A countrywide survey by this national agency shows that 56 per cent of the private schools surveyed expect full enrollments by opening date. Only 37 per cent in midsummer of last year expected capacity attendance.

Military, nonmilitary and girls' preparatory and junior colleges rank high in the percentage showing increased inquiries as a result of school advertising. All classes of schools report a higher percentage of requests for catalogues than last year.

INSTRUCTION

Small Groups

In preparation for the introduction of a new system of small group instruction at Lawrenceville School, Lawrenceville, N. J., structural alterations are being made on Memorial Hall and Fathers Building

Forty-two conference rooms will be made ready by fall, with seven more to be completed by 1937, each resembling a master's private study, furnished with a large round table surrounded by comfortable chairs. A separate conference room will be assigned each instructor in which to conduct his class of twelve boys.

This plan of teaching is the result of a gift by Edward S. Harkness, New York philanthropist, who has also provided funds for the salaries of the additional teachers made necessary by the small group classes.

Debunked

The age at which there is no further advancement of learning capacity is not thirteen, sixteen or eighteen, according to studies made at the University of Chicago by Dr. Frank E. Freeman, but nineteen and a half or beyond. Annual

tests made on a group of pupils through a period of ten or eleven years spent in the university laboratory schools and the university proper show no diminution in growth of learning power at nineteen and a half years, the average time of the most recent tests. According to Doctor Freeman, there is no typical "curve of learning" though there is a slowing at the age of twelve or thirteen for most pupils. Some grow rapidly in learning power for a time, then slowly; some grow slowly, then rapidly, and some grow steadily.

To Train Apprentices

As the first step in the inauguration of his apprentice training program to prepare boys for industrial trades, Joseph P. Nourse, new superintendent of San Francisco schools, will ask the board of education to appoint a superintendent of apprentice training.

"Our aim," said Mr. Nourse, "is to turn out boys who have at least initial training to work as cabinet makers, carpenters, metal workers, machinists or other craftsmen. Part of their training, while in school, will be to do actual apprentice work in their trades. We do not expect our graduates to be master workmen, for we realize they will still have to serve an actual apprenticeship in the trade."

Mr. Nourse is being assisted in the program by Archie Mooney of the state department of public relations, who was named by the school board as coordinator of apprentice training, to acquaint school authorities with specific needs.

FINANCE

Consolidation But No School

Political factions war bitterly, and the town of Hardy, Iowa, remains school-Last fall the consolidation of several rural districts with the Hardy Independent district was voted through successfully. Shortly after this the school at Hardy was destroyed by a fire. One faction then felt that it was obligatory for the newly consolidated district to build a school replacing it. Taxpayers in the rural districts, secure in their small district schools which they can continue to use, and resenting having the burden of a new school put on them, recently succeeded for the second time in blocking an effort to float a bond

issue to construct the needed building.

Hardy pupils in the first, second and third grades attended their classes last semester in an old bank building; fourth, fifth and sixth graders met daily in a wooden false-fronted pool hall building, and the seventh to tenth grades traveled five miles each day to Renwick, which permitted them to attend its schools.

No Soap

Fifty thousand dollars worth of soap and towels for school children of New York City was protested at a recent public hearing of the 1937 budget. The money might better be spent for truant officers, was the contention, rather than to make it possible for the children to wash their hands in the school lavatories. The budget was increased \$5,420,837 to a total of \$142,509,894.

Budget, Pay Increase

An increase of \$45,000 over last year has been made in the newly adopted budget for the 1936-1937 school year by the board of education of Moline, Ill. The increase will be used primarily to restore pay cuts to teachers, janitors and other school board employees, \$25,000 going to teachers, \$1,000 to janitors and \$1,600 to clerks.

GIFTS

For Erection and Maintenance

The Loomis School, Windsor, Conn., is to receive \$300,000 from the estate of the late Virginia Palmer, New London, Conn., as a memorial to her father, half the amount to be used for the erection of a building, the rest for its maintenance. Her will also provides that the sum of \$500,000 be given to the Connecticut College for Women, \$300,-000 to be used for the erection and equipping of an auditorium and the balance to be held in trust by the college, the income to be applied to the upkeep of the auditorium. This gift is also a memorial to Miss Palmer's father, who was one of the early trustees of the college.

Art Goes to Kentucky

Pioneering in the subject of graphic art, much as it did in radio, the University of Kentucky this fall is inaugurating a program for the education of adults and students in the field of etchings, engravings, lithographings and woodcuts. The material to be used in the course has been made available through a \$1,000 grant from Carnegie Corporation, New York City. It includes 1,000 lantern slides from the



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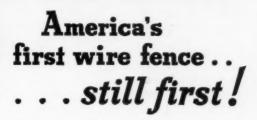
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Metropolitan Museum of Art and books covering the history of prints and of early book illustrations. One group of lantern slides is a collection of fifty Audubon prints, and another is of English sporting prints.

One Building for Purdue

Purdue University recently inherited a building valued at approximately \$60,000, through the will of the late Frank M. Cary, a business man of Lafayette, Ind. Mr. Cary also stipulated in his will that his estate give money for the erection of a third residence hall for men in the event Purdue decides to extend the property.

LEGISLATION

School Taxes in Oregon

Two initiative petitions for constitutional amendments affecting schools in Oregon have just been filed and will be voted upon in November. One proposes to limit the total permissible state property tax payable in 1937 to six mills per dollar of assessed and equalized valuations. It would limit county, school district and other political subdivision levies in 1937 to the amount levied in 1935 with a 4 per cent additional reduction annually until 1942 and later years, when the maximum amount which could be levied by any state or political subdivision would be 80 per cent of the amount levied in 1935. The other initiative petition proposes to permit school districts having a population exceeding 100,000 to levy taxes for 1937 in an amount not exceeding 80 per cent of the total 1932 levy of any such district.

HEALTH

Nutrition: Normal

Neither the American school child nor his parents have suffered from undernutrition as the result of the depression, declared Dr. James S. McLester, Birmingham, Ala., retiring president of the American Medical Association, in speaking before the American Institute of Nutrition. In many instances families are in a better nutritive state than in an earlier period.

A selected group of physicians specializing in nutrition disorders throughout the country were almost unanimous in this opinion, according to Doctor McLester, who ascribed this situation chiefly to three reasons:

1. The parent who feels the pinch of necessity is now giving greater thought than ever before to the welfare of his child.

2. In the last five years the lunchrooms of public schools have undergone rapid development.

3. Welfare agencies have been keenly alive to the hazards confronting the American child and have been highly efficient in meeting them.

Education is the explanation of this fact, Dr. McLester believes. The welfare agencies gave these people not only material help but insistent advice as to what to eat. Thus not only was starvation forestalled in a large group but in some instances the nutritive deficiencies of years were corrected.

Tuberculous Teacher

After the death from pulmonary tuberculosis of an elementary school teacher in a town in Germany, the pupils in all six grades of the school in which she taught were given the Hamburger percutaneous tuberculin test. Out of nineteen children who had been in her classroom for six months, fifteen gave a positive reaction. All three of the children who had been in her classroom for two years or more gave a positive reaction, and out of thirty-two who had been with the teacher for five and one-half years, twenty-two gave a positive reaction.

BUILDINGS

Destroyed Before Finished

Two weeks before its scheduled completion, fire destroyed the new Chanute Junior College building under construction at Chanute, Kan., the high school annex and the high school auditorium in a \$150,000 blaze. The origin of the fire has not been determined, but it apparently began burning in the upper part of the college building, quickly spreading to the adjoining high school. The day preceding the fire, radiators, ventilating fans and 400 unpacked steel chairs had been moved into the college building. These were lost.

\$200,000 Loss

Two girls working in the office of the Napa Union High School, Napa, Calif., after school was over, were startled when firemen appeared and ordered them out of the building. Two hours later the fire, of whose existence they had had no knowledge, was finally brought under control, having done nearly \$200,000 worth of damage. The north and south wings of the building were saved, but when the roof over the large auditorium and the little theater collapsed, burning planks and beams fell into these sections and did considerable damage. Plans for rebuilding the school

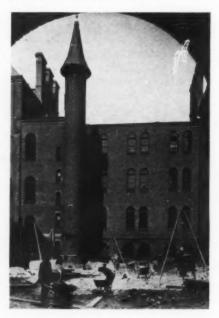
are already under way, with the appointment of William Herbert, Santa Rosa, and C. L. Hunt, Napa, as architects.

Designed for Mechanics

Architectural plans for the first school in Brooklyn, N. Y., to be designed for specialized instruction in automobile mechanics have been approved by the city art commission. The building will house the Williamsburg Vocational School and will accommodate 1,600 pupils. One wing of the three-story brick and limestone building will be devoted to special equipment for instruction in automobile mechanics and the remaining space will include academic classrooms, laboratories, a gymnasium, an auditorium and a cafeteria. Construction of the building, which is to cost \$1,400,000, will probably be begun before the end of the year.

Seats for 131,231

Expanded by more than 3,180 class-rooms, the public school system in New York State has provided accommodations for 131,231 additional pupils through the auspices of the PWA, according to a report made recently by the state PWA director. Aid has been given throughout the state for the construction of more than 200 new school buildings and the renovation of twenty-four. New facilities have been provided for 61,965 elementary school pupils and 53,729 high school pupils; an additional 15,537 pupils have been provided for in schools that combine the two.



America's oldest high school, the Boston English High School, built in 1821, is being reconstructed and added to by PWA funds. Largest of Boston's secondary schools with 3,700 pupils, it was originally the English and Latin School.

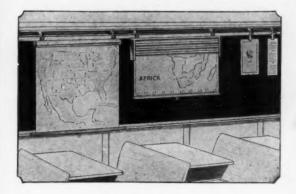
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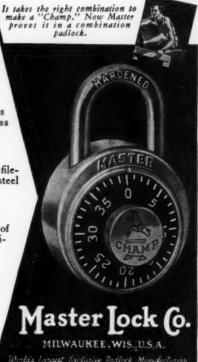
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Six Years Later

Closed six years ago, when shifting population centers lowered its attendance, the Hawthorne School, Berkeley, Calif., is to be reopened this fall, having undergone rehabilitation work costing \$1,771.85. The school will have accommodations for kindergarten and grades one to six.

Alphabet Tangle

When the federal government changed from the FERA to the WPA it stopped work on a passway being built between the high school and the Lincoln School at Southington, Conn., under the auspices of the former. The passway is now about to be completed.

Air Conditioned

The first completely air conditioned building on the campus of the University of Chicago will be the new \$650,000 Public Administration Clearing House. It was recently announced that the Spelman Fund of New York had added to its million dollar grant of last January enough to defray the cost of complete temperature control. Plans are being drawn by Zantzinger & Borie, Philadelphia architects, with Emery B. Jackson, associated.

The primary purpose of the new Gothic structure is to provide office space for technical, nonpolitical organizations that are interested in improvement of public administration.

VISUAL EDUCATION

Use of 16-mm. Films Increases

Showing an increase of 14,313 reels over a five-year period in the use of classroom or 16-mm, silent motion picture films, and a decrease in the circulation of 35-mm, silent motion picture films, the Philadelphia school system, during the year 1935-1936, circulated 20,747 reels of the 16-mm. film and 2,169 reels of the 35-mm. film. The decrease in the use of 35-mm. films is probably due, according to James G. Sigman, director of visual education for Philadelphia, to the use of auditoriums for classrooms and because 16-mm. projectors may be run by any teacher, while 35-mm. machines require the services of a licensed operator.

Movies Attend Show

Motion pictures enjoyed a major position this year in the annual exhibition of educational material which was staged at Columbia University. This marked their first appearance at the show, which embraces all levels of education from the kindergarten to the

fourth year high school. Pictures were featured each day. Another popular display centered about foreign travel. An 8-foot model of the liner *Normandie* and large photographs illustrated the pleasures of sea voyages.

Additional Copies

To meet the increasing demand for "Books—From Manuscript to Class-room," the dramatization of the making of a textbook, the John C. Winston Company, Philadelphia, has announced that new 16-mm. silent versions of the film have been added to the supply for free distribution to schools and educational institutions. During the last school term, the picture was viewed by 138,000 persons, an increase in distribution of more than 35 per cent.

From Uncle Sam

The Division of Motion Pictures, U. S. Department of Agriculture, presents: "Stop Forest Fires!" and "The Life of Plants." Both are sound films, in 16-mm. or 35-mm. widths. The first is a general discussion of the problem of the forest fire, with striking scenes from recent major conflagrations. The other film shows by slow motion photography how seeds germinate and how roots, stem, leaves and flowers develop.

Sealing

A motion picture that in the making cost the lives of twenty-eight men ought to appeal even to the jaded tastes of the average high school pupil. Such a thriller is "The Viking," the story of a Newfoundland seal hunt, a 16-mm. sound-on-film released by Bell and Howell Company. The producer, Varick Frissel, and the sturdy sealer Viking were included in the high casualty toll of this educational film. It is six reels long. Sir Wilfred Grenfell vouches for its authenticity.

Motion Pictures Interpret School

A motion picture of classes in session, working on projects and giving demonstrations, was made at the Kearney Junior High School, Kearney, Neb., by A. W. Nelson, principal of the school, with the assistance of a local photographer. The picture was shown as a feature of junior high school week.

RADIO

Training for Radio

Practical broadcasting knowledge will be obtained by a number of University of Kentucky students in the university's radio studios this fall. A limited group will be admitted to the departments of announcing, production, engineering, music and drama to do actual work in the programs emanating through WHAS, the 50,000-watt clear channel station of the Louisville *Courier-Journal*.

MEETINGS

N. A. P. S. B. O.

The opening day of the National Association of Public School Business Officials convention, October 12, will be St. Louis Day. The board of education of the hostess city has announced, through its president, James J. Fitzgerald, that the public school system will visually demonstrate to all delegates the various processes carried out by the board in its business organization, its building and maintenance divisions and its supply department.

Four tours have been arranged for visitors, following which delegates will be given a buffet supper through the courtesy of the exhibitors' association, preceding the formal opening of exhibits.

Formal programs start the next day, with some twenty-four prepared addresses. Among the speakers are Dr. N. L. Engelhardt of Columbia University; Lloyd W. King, state superintendent of schools of Missouri; Dr. John Guy Fowlkes of the University of Wisconsin; Dr. Isidor Loeb of Washington University, and Dr. Henry Gerling, superintendent of St. Louis schools.

A panel on the financing of education by federal, state and local governments will be presided over by Dr. Fred Engelhardt, professor of educational administration, University of Minnesota.

Round tables scheduled for the luncheon hour on October 13 and 14 will deal with finance and accounting, construction and maintenance of buildings, and operation of the school plant. The convention closes October 16.

A special program of entertainment for women in attendance has been planned by the convention bureau.

From Lunchroom to Lunchroom

School lunchroom directors attending the National Restaurant Convention in Chicago, October 5 to 9, have been given a day all to themselves, according to plans being arranged by F. O. Washam, director of school lunchrooms of the Chicago board of education. The meeting will be held in one of the high school lunchrooms and those attending may discuss problems peculiar to their own work. Of particular interest to school lunchroom directors will be a large display of restaurant equipment and foodstuffs staged at the National Restaurant Mart, 666 Lake Shore Drive.

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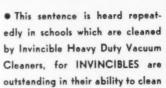
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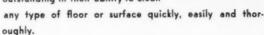
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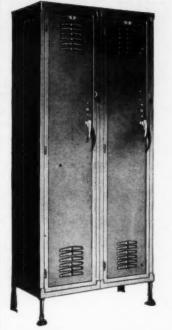
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NAMES IN NEWS

New Superintendents

CLAUDE F. GADDY, assistant executive secretary of the state school commission of North Carolina, has been elected superintendent of schools for Raleigh, N. C., to succeed PAUL S. DANIEL.

Jesse Morgan, principal of the Woodbury High School, Salem, N. H., was elected superintendent of schools for the district that includes Hinsdale, Washington, Windsor and Peru, Mass.

ORT L. WALTERS, principal of the high school at Goshen, Ind., was appointed superintendent of schools to succeed the late John W. Foreman. Harold Bechtel, principal of the West Goshen School, was appointed to the principalship of the high school.

O. E. HILL, junior high school principal and supervisor of elementary

schools at Galion, Ohio, has been elected superintendent of schools.

DR. HARMON LOWMAN, superintendent of schools at Livingston, Tex., has been appointed superintendent of schools for the Goose Creek Independent School District, Goose Creek, Tex., to succeed W. R. SMITH.

RICHARD SPEAS has been elected to succeed MORRIS MILLER as superintendent of schools at Ferguson, Iowa.

PHILIP FJELSTED has resigned the superintendency of schools at Biwabik, Minn., to accept a similar position at Wadena, Minn.

W. E. LOWERY, principal of the high school at Huntsville, Tex., has been elected superintendent of schools at Orange, Tex. He will be succeeded at Huntsville by ALTON GRIFFIN, a teacher in the Huntsville school.

Myron T. Johnson, superintendent of Washington Rural School, Jackson County, Ohio, has been appointed superintendent of the Pickaway Township School near Circleville, Ohio, to succeed M. C. WARREN, who resigned.

EMMETT BERRY, superintendent of schools at La Habra, Calif., has been elected superintendent of schools at Porterville, Calif., to succeed CHARLES BISHOP.

JOHN H. STAMPER, superintendent of schools at Karnes City, Tex., was elected superintendent of schools at Kenedy, Tex., following the resignation of A. W. CHERRY, head of Kenedy's schools for the last eleven years.

RAY F. REED, who at different times has been superintendent of schools at Decatur, Plano, Libertyville and Grandview, Iowa, has been appointed superintendent of schools at Lovilia, Iowa.

PRINCIPAL RUSSELL WILSON was elected superintendent of schools at Alpena, Mich., succeeding Supt. George H. Curtis.

E. H. WILCOX, superintendent of the Mountain Lake, Minn., public schools for twelve years, has been appointed superintendent of the schools at Sleepy Eye, Minn. He succeeds L. A. LAVINE, who has accepted a similar position at Virginia, Minn.

R. E. SONNEMAN, principal of the school at Sun River, a part of the Great Falls, Mont., school system, has been elected superintendent of schools at Harlowton, Mont.

GEORGE W. REICHENBACK, principal of the high school at Waterbury, Neb., has been appointed superintendent of schools at Plymouth, Neb., where he succeeds Clarence Johnson. Mr. Johnson has taken a similar position at Firth, Neb.

M. R. Kneale has been appointed superintendent of schools at Platteville,

DAVID H. STEWART, superintendent of schools at Beaver, Pa., has been elected superintendent of schools at Dormont, Pa., to complete the unexpired term of the late RALPH RADCLIFFE.

J. S. MATTHEWS, head of the English department at the Waycross High School, Waycross, Ga., has been appointed superintendent of schools at Hawkinsville, Ga.

R. A. DEEN, newly elected superintendent of the Birdville Independent School District, Tex., has gone to court to hold his job, asking that the district be enjoined from entering into a contract with any other superintendent during the two-year period of his own contract with any other superintendent durschool board on April 7. Subsequently, the majority personnel on the board changed, the minutes of the April 7 meeting were declared void and his contract terminated. He received notice of this termination several months later.

Films for the School Screen

XIII - Central America

Central America—Presents a study of the peoples, cities, industries and resources. Shows urban streets, natives, ox teams, open markets, railway stations, luxuriant vegetation, mahogany forests and banana area. 16 mm., silent. 1 reel. For rent or purchase. Teaching Films Division, Eastman Kodak Company, Rochester, N. Y.

In the Path of the Galleons—A Fitzpatrick travel film featuring a cruise route from New York through the Spanish Americas en route to Mexico and California. 3 reels. 16 mm. and 35 mm., silent. Transportation charges only. Publicity Department, Grace Line, 30 Rockefeller Plaza, New York City.

Ebony Shrine—Ancient cathedrals and palaces of Guatemala. 1 reel. 16 mm., sound. For rent or purchase. Frederick L. Gerke, 45 West 45th Street, New York City.

Menace of Guatemala—Studies of native life and scenes of the great volcano, Agua. 1 reel. 16 and 35 mm., sound. For purchase only. Ideal Pictures Corporation, 30 East Eighth Street, New York City.

Street, New York City.

Colorful Guatemala—A James A. Fitzpatrick travel film in color. 1 reel.

35 mm., sound. Transportation

charges only. Grace Line.

Lowell Thomas in Latin America—Trip
through the countries, with a lecture
accompaniment. 1 reel. 35 mm.,

sound. For rent or purchase.

cipal Distributing Corporation, 1501

Broadway, New York City.

White Indians of Central America—R. O. Marsh of the American Museum of Natural History leads an expedition into the jungles of Panama in search of the White Indians, born in brown Indian families; along the Chucumage River; Chocois, Cunas and San Blas tribes; primitive villages; sugar cane mills; Mr. Marsh brings back three White Indian children to his home on the St. Lawrence and studies them in their new environment. 1 reel. 35 mm., silent. For rent. International Educational Pictures, Inc., 40 Mount Vernon Street, Boston.

The Panama Canal and Its Historical Significance—Pictorial survey of the whole work, from ground and from air. 1 reel. 16 and 35 mm., silent. For rent or purchase. Society for Visual Education, 327 South La Salle Street, Chicago.

Panama Canal—The "Big Ditch" in construction and completed. Animated geography lesson. 2 reels. 35 mm., silent. For rent or purchase. Theodore Roosevelt Memorial Association Film Library, 28 East 20th Street, New York City, or Motion Picture Bureau, National Council of Y. M. C. A., 347 Madison Avenue, New York City.

The Panama Canal—Location of canal and construction obstacles; construction of canal, and traffic going through it. 1 reel. 16 mm., silent. For rent or purchase. Teaching Films Division, Eastman Kodak Company, Rochester.

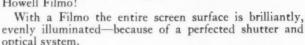
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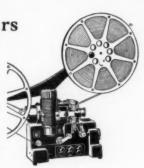
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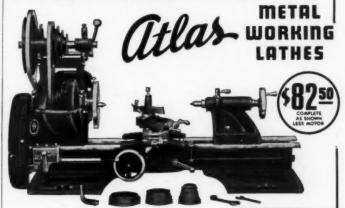
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CHARLES R. CROOKE, former principal of the Willow Glen School, Santa Clara County, California, and a member of the county board of education, has been appointed superintendent of schools and principal of the high school at Mountain View, Calif. He succeeds CAPT. DEL-BERT BRUNTON, who has held the position for eight years.

J. E. WILLIAMSON is the new superintendent of schools at Stone Mountain, Ga. For the last nine years he has been with the Centralhatchee Consolidated School in Heard County, near Franklin.

ELLIOTT LISTER, superintendent of schools at Braddyville, Iowa, resigned to accept a similar position at Truro,

H. C. MILLIGAN, superintendent of schools at Clarksville, Ohio, for thirteen years, has been appointed head of the Massie Township schools at Harveysburg, Ohio.

B. W. MILLER, principal of the Charles Bender High School, Humble, Tex., has been elected superintendent of schools for Dayton, Tex.

VERNE HUTCHINSON, a member of the school system at Frankfort, S. D., has been elected superintendent of schools at Estelline, S. D., where he will succeed E. C. MIKKELSEN, who is accepting a similar position at Salem, S. D.

L. A. WOOLDRIDGE, principal of the John H. Reagan Junior High School, Sweetwater, Tex., has been appointed superintendent of the newly formed school district No. 8, which includes Maryneal, Mesquite, Barnett, Champion and Goode.

OTIS WILSON, principal of the Yreka High School, Yreka, Calif., for five years, resigned to accept the position of superintendent of schools and principal of the high school at Emeryville, Calif.

G. T. WINDELL, principal of the county school at Mount Pleasant, N. C., has been appointed superintendent of schools at Spencer, N. C.

E. E. HARWOOD, principal of the Hoffman School, Calexico, Calif., has been appointed district superintendent of schools at Tustin, Calif. He will be succeeded at the Hoffman School by MRS. HAZEL ERICKSON, a teacher in the Calexico school system.

Private School Personnel

SARAH HINCKS has been chosen headmistress of Gordon School, Providence, R. I., an elementary school extending to the sixth grade. Miss Hincks has been principal of Shady Hill Country Day School, Chestnut Hill, Pa., for six years. With the appointment, MAR-GARET E. COE, acting headmistress, will return to the Park School, Baltimore, from which she has been on leave of absence.

CHANDLER B. MOSHER, a member of the Bradford Academy faculty, Bradford, Vt., has been appointed principal of the McIndoes Academy, McIndoes Falls. Vt.

DOROTHY M. BLATTER, assistant prin-

cipal of Burton Junior High School, Grand Rapids, Mich., has resigned from that position to become the head of the lower school at the Frances Parker School, Chicago. Miss Blatter has been serving as chairman of the committee making a study of behavior problems in relation to juvenile delinquency at Burton for the national crime commission.

ELSIE G. HOBSON, headmistress of Concord Academy, Concord, Mass., since 1922 has resigned. Miss Hobson, before her appointment to Concord, was for four years head of the Phebe Anna Thorne School at Bryn Mawr, Pa.

Among the Colleges

DR. WILLIAM ALFRED EDDY will be inducted into office as president of Hobart and William Smith Colleges at Geneva, N. Y., on October 2, the induction address to be delivered by DR. HAROLD WILLIS DODDS, president of Princeton University.

DR. ALBERT PERLEY BROGAN, professor of philosophy and assistant dean of the graduate school of the University of Texas, has been appointed dean to succeed Dr. HENRY WINSTON HARPER, who is retiring September 1.

DR. PAUL V. SANGREN, dean of administration at Western State Teachers College, Kalamazoo, Mich., has been appointed president to succeed Dr. DWIGHT B. WALDO. The appointment becomes effective September 1. Doctor Waldo, who has been president since the founding of the school in 1904, desired to be relieved of administrative duties because of advancing age. He has been appointed professor of American history, his field of specialization before taking up administrative work.

DR. GEORGE F. CRESSMAN, superintendent of the schools of Doylestown Borough, Pennsylvania, has been named head of the department of education at West Chester State Teachers College. J. LEONARD HALDERMAN, principal of North Coventry Township High School, Pottstown, Pa., will succeed Mr. Cressman at Doylestown.

G. R. Davis, principal of Fairbury High School, Fairbury, Neb., for ten years, has announced his resignation to be effective immediately. He has accepted a position with the extension service of the University of Nebraska in connection with the 4-H Clubs.

Assistant Superintendents

VINCENT PAUL MAHER, L. B. TRAVers, Charles Barclay Moore and Howard Campion were appointed assistant superintendents of schools at Los Angeles, following the reorganization of the administrative personnel upon the death of HARRY M. SHAFER.

Coming Meetings

- Sept. 27-29—Council of School Superintendents, Saranac Inn, N. Y.
 Oct. 2-3—Conference of Food Service Directors, Hotel Commodore, New York City.
- Oct. 7-9—New Hampshire State Teachers Association, Littleton.
- Oct. 8-10—Vermont State Teachers Association, Burlington.
 Oct. 12-16—National Association of Public School Business Officials, St. Louis.
- 15-17-Wyoming Education Associa-
- tion. Laramie. ct. 22-23—Indiana State Teachers' Association. Indianapolis.
- Oct. 22-24-Mississippi Education Association, Jackson.
- ct. 22-24—Rhode Island Institute of Instruction, Providence.
- ct. 23-24—Maryland State Teachers' Association, Baltimore.
- Oct. 29-30-Maine Teachers' Association,
- 29-31—Montana Education Associa-on, simultaneous meetings at Helena, tion, simultaneous meetings at H Kalispell, Great Falls and Billings.
- Oct. 29-31-Utah Education Association, Salt Lake City.
- Oct. 30-Connecticut State Teachers Association, Hartford,
- ov. 4-6-North Dakota Education Association, Grand Forks.
- Nov. 5-7—Colorado Education Association, simultaneous meetings at Denver, Pueblo and Grand Junction.

- Nov. 5-7-Iowa State Teachers Association, Des Moines.
- Nov. 5-7-Minnesota Education Association, St. Paul.
- Nov. 6-7.—Kansas State Teachers Associa-tion, simultaneous meetings at Topeka, Salina, Hays, Garden City, Hutchinson, Winfield, Coffeyville and Fort Scott. Nov. 9, week of.—Delaware State Education Association, Wilmington.
- Nov. 11-14—Missouri State Teachers Association, Kansas City.
- Nov. 12-14—Arizona State Education Association, Tucson. Nov. 12-14—West Virginia State Education Association, Huntington.
- Nov. 13-16—New Jersey State Teachers' Association, Atlantic City. Nov. 19-20—Illinois City Superintendents' Association, Springfield.
- Nov. 19-21—Louisiana Teachers Association, Monroe.
- Nov. 22-25—South Dakota Education Asso-ciation, Rapid City.

 Nov. 26-28—Texas State Teachers Associa-tion, Fort Worth.
- Dec. 10-12—National Conference on Educa-tional Broadcasting, Washington, D. C. Dec. 28-30—Pennsylvania State Teachers Association, Harrisburg.
- Feb. 20-25—Department of Superintendence, National Education Association, New Orleans.
- Feb. 26-27--American Association of Junior Colleges, Dallas, Tex.

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ALBERT E. TUTTLE, principal of Mamaroneck High School, Mamaroneck, N. Y., for the last twelve years, has been appointed assistant superintendent of the Mamaroneck schools.

P. H. Powers has been named first assistant superintendent of schools at Cleveland. He will be succeeded in the principalship of East Technical High School by BARNETT W. TAYLOR, principal of Glenville High School.

Principal Changes

WILLIAM J. GOODWIN, for the last seven years principal of the Hollenbeck Heights Junior High School, Los Angeles, will step in as principal of San Pedro High School, succeeding JULIETTE PIERCE. GEORGE HOUK, who has been serving as acting principal of the school, will resume his former duties as vice principal. The vacated principalship of Hollenbeck Heights will be filled by J. C. RINEHART, Central Junior High School principal, who in turn will be succeeded by Marion Eugene Her-RIOTT, vice principal of John Muir Junior High School.

CLAYTON R. WISE, director of personnel for the Cleveland school board has been appointed principal of Glenville High School to succeed BARNETT W. TAYLOR. DUDLEY C. COURTRIGHT, teacher at John Marshall High School. has been appointed principal of the Cleveland Trade School.

RALPH J. STANLEY, principal of Vir-

gil Central School, Courtland County, New York, was appointed principal of the high school at Hadley-Luzerne to succeed CLAYTON H. BROWN.

FRANCIS GERBER, athletic coach at the Summithill High School, Summithill, Pa., has been elected principal of the school to succeed E. V. McCullion.

Z. T. FORTESCUE, activity director of the high school at Port Arthur, Tex., has been appointed acting principal of the Woodrow Wilson Junior High School during the leave of absence of ARVIN N.

GOLDEN WRIGHT, principal of the high school at Hinckley, Utah, has been appointed principal of Millard High School, Fillmore, Utah, where he will succeed his cousin, IANTHUS WRIGHT, who resigned to accept a position at Cedar City. Mr. Wright was elected mayor of Hinckley at the municipal election last fall.

LAWRENCE STUART was elected to the principalship of Hallowell High School, Hallowell, Me., following the resignation of PHILIP H. ANNAS. He is president of the Cumberland County President's Association.

EDWARD W. MARTIN, assistant principal of Hudson High School, Hudson, Mass., has been appointed principal of Adams High School, Adams, Mass.

W. J. ROBERTSON has been elected principal of the Santa Fe High School at Santa Fe, N. M., succeeding RAY-MOND P. SWEENEY, who was promoted to the position of superintendent of the

Santa Fe city schools. Mr. Robertson was formerly principal of the high school at Las Vegas, N. M.

LEROY ALLISON, principal of the school at Cambridge, Neb., has been appointed principal of the high school at Blair, Neb.

LOREN F. MILLER was elected principal of the school at Live Oak, Calif., to succeed LAWRENCE OLINDER.

WILLIS ROLLINS, principal of Jay High School, Jay, Me., has been appointed principal of Milo High School, Milo, Me.

PERCY E. GRAVES has been elected principal of the high school at Brunswick, Me., to succeed PHILIP L. GAR-LAND, who has accepted the principalship of the high school at Attleboro, Mass. Mr. Graves has been a member of the Brunswick High School faculty for three years.

RAYMOND F. WEBB, for three years principal of the Park Road Grade School, Mount Tabor, N. J., has been appointed principal of the George Washington School, Morristown, N. J.

ARVID MITCHELL, who has been appointed principal of the Samuel G. Love School, Jamestown, N. Y., will be succeeded at the high school at Cassadaga, N. Y., by C. Albro Newton, principal of the Celoron High School, Celoron, N. Y.

WARREN H. SEBRING, teacher of mathematics and physics at the high school in Tannersville, Pa., has been appointed principal of Coolbaugh Township High School, Monroe County, Pennsylvania.

LAWRENCE EVANS, vice principal of the high school and junior college at Boone, Iowa, has been appointed principal of the high school at St. Louis Park, Minn., to succeed J. W. McNeal, whose resignation precipitated a pupils'

ARTHUR W. Morse has accepted the position of principal of the Suffield Junior High School, Southington, Conn. He has for the last two years been principal of the Beecher Street Grammar School of Southington.

FRANK T. COUGHLIN, JR., has been named principal of the high school at Belchertown, Mass.

ROSCOE J. BACHUS, principal of the high school at Old Forge, N. Y., for twenty-two years, and president of the Associated Academic Principals of New York State, has been chosen to succeed CHARLES B. SHAVER as principal of the high school at Minoa. Mr. Shaver has accepted the principalship of the high school at Sodus.

IVAN HOWARD LINDER, vice principal of the senior high school at Sacramento, Calif., has been appointed principal of the Palo Alto High School, Palo Alto,

On the Air During September

The following programs of particular interest to school people are arranged by the National Broadcasting Company, the Columbia Broadcasting System and the Mutual Broadcasting System. The time is Eastern Daylight Saving.

Daily

National Farm and Home Hour¹-1:30-2:30 p.m. (NBC-WJZ).

Monday

Sept. 14—Forum on Character Building—2:00-2:30 p.m. (NBC-WEAF).

2:30 p.m. (NBC-WEAF).

Children's Songs, Stories and Novelties,² Dorothy Gordon—5:15-5:30 p.m. (CBS-WABC).

Safety Musketeers, talk, music and dramatization, U. S. Office of Education—4:00-4:15 p.m. (CBS).

Education-in-the-News, U. S. Office of Education—6:45-7:00 p.m. (NBC-WEAF).

Tuesday

Have You Heard? (Introductions to fascinating corners of natural science) U. S. Office of Education—3:45-4:00 p.m. (NBC-WJZ). Science Service Series, Watson Davis, Editor-4:30-4:45 p.m. (CBS).

Wednesday

Grant Park, Chicago, Band and Orchestra Concerts—9:00-10:00 p.m. (NBC-WJZ).

¹Except Sunday. ²Also Wednesdays and Fridays.

Radio Guild's Historical Dramas—4:30-5:30 p.m. (NBC-WJZ).
Answer Me This (Self tests in the social sciences behind the news)—5:30-5:45 p.m. (NBC-WEAF).

Portland Symphony Orchestra, Basil conductor—8:00-9:00 p.m. (CBS). Basil Cameron,

Magic of WEAF). of Speech--2:00-3:00 p.m. (NBC-

Grant Park, Chicago, Band and Orchestra Concerts-10:00-10:30 p.m. (NBC-WJZ).

Saturday

Beethoven Sonatas, violin and 'cello, Ber zowski and Bay—11:30 a.m.-12 m. (CBS).

Sunday

The World Is Yours, Smithsonian program—11:30 a.m.-12:00 m. (NBC-WJZ).
University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).
Speakers and Events in International Field (transatlantic broadcast)—12:45-1:00 p.m. (CPS).
Titans of Science—7:00-7:15 p.m. (MBS).

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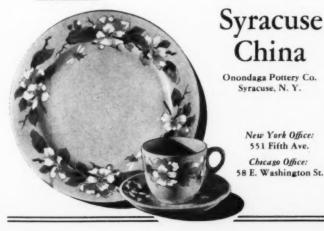
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Calif., where he succeeds the late WAL-TER H. NICHOLS. GEORGE STEWART, who has been acting principal since Mr. Nichols' death, has been made vice principal.

PERCY KINGSLEY, assistant principal of the high school at Shelton, Conn., has been appointed to succeed Henry S. Moseley as principal.

BEN M. HANNA, principal of Lincoln Junior High School, Rockford, Ill., has been named principal of the high school at Norwood, Ohio.

CHARLES W. MacLean, principal of Verona High School, Verona, N. Y., has been elected principal of the Oriskany Central School, Oriskany, N. Y., to succeed RAYMOND T. SANT.

D. H. LOREE, principal of the high school at Connellsville, Pa., was elected principal of the schools of Hollidaysburg, Pa., to succeed John E. Shrum.

G. A. Speiss, principal of the high school at Maxwell, Calif., for five years, resigned to accept a position teaching in San Francisco. C. A. Castle, a member of the faculty, has been elected to succeed Mr. Speiss.

R. A. Cox, principal of the high school at Jonesboro, Ark., has announced his resignation from that position and his acceptance of the office of principal of the high school at North Little Rock, Ark.

WHITNEY F. PARKER, principal of Hartford High School, White River Junction, Vt., for nine years, has been appointed principal of Littleton High School, Littleton, N. H. HILTON C. HOLLAND, athletic instructor of the Hartford school, has been named principal to succeed him.

EDWARD SCHARER has been named principal of the high school at Arena, Wis., where he succeeds HARRY WALTER, who resigned to enter business.

GEORGE E. SHATTUCK, principal of the high school at Darien, Conn., for the last six years, has resigned in order to accept the principalship of the high school at East Hartford, Conn. Bernard Ross, principal of the East Hartford High School for thirteen years, has been named principal of the high school at Gardner, Mass., to succeed Leighton S. Thompson, who has accepted the principalship of the high school at Norwood, Mass.

CECIL ERWIN, Brazil, Ind., has been elected principal of the Crown Point High School, Crown Point, Ind., succeeding BASIL PRUITT. Mr. Erwin has for some time been in charge of the Van Buren Township High School.

W. T. ATKIN, principal of the high school at Dorris, Calif., has been appointed principal of the Yreka High School, Yreka, Calif. CHARLES R. GREENE, principal of the high school at Happy Camp, is to succeed Mr. Atkin, and PAUL GOODWIN, teacher at the high school at Weed, will take over the principalship at Happy Camp.

Retiring

FRANK A. BOUELLE, superintendent of schools at Los Angeles, has announced his retirement for February 1, at which time he will have concluded forty-one years of service in the city's schools.

JAMES F. BARKER, assistant superintendent of schools in charge of vocational education, Rochester, N. Y., is retiring some time during the coming semester, after forty years spent in the schools of Milwaukee, Wis., Grand Rapids and Muskegon, Mich., Cleveland and Rochester. He will be succeeded by VERNE A. BIRD, who will be designated until Mr. Barker leaves as assistant in vocational education.

DR. JOHN F. KEATING, superintendent of the south side school district, Denver, Colo., for forty years, is retiring on September 1. He will remain with the district in an official capacity, filling the office of consulting superintendent.

W. E. WEAVER, superintendent of schools at Morrison, Ill., has announced his retirement. Mr. Weaver, who has been connected with the school system for more than thirty years, will be succeeded by E. H. Mellon, superintendent of schools at Winchester, Ill.

CHARLES L. BIEDENBACH, member of the Berkeley, Calif., school system for thirty-five years and principal of the high school for the last twenty-four, is retiring at the close of the first semester of the school year for 1936-1937. At that time Mr. Biedenbach will have completed fifty years in the service of California's schools.

Further Appointments

WILLIAM MARTIN PROCTOR has been appointed editor of the California Journal of Secondary Education, a position left vacant by the death of Horace M. Rebok. Professor Proctor is executive head of the division of teacher training and professor of secondary education at Stanford University. Dr. Aubrey A. Douglass, chief of the division of secondary education of the California State Department of Education, will be associated with him as managing director of the publication.

ELLSWORTH C. DENT, former chief of the motion picture division, U. S. Department of the Interior, has been appointed director of the RCA Victor educational division.

BURLEY BECKDOLT, principal of the school at Francesville, Ind., resigned to

accept the position of private secretary to the dean of education at Indiana University.

EDWIN L. FINDLEY, principal of East High School, Cleveland, has retired at the age of sixty-six, with thirty-nine years in the service of Cleveland's schools to his credit. F. L. SIMMONS, assistant principal of Collinwood High School, will succeed Mr. Findley.

MRS. M. D. BUSSELL, principal of the junior high school at Gardiner, Me., and reelected to that position by the board for the coming year, has decided to retire. She has been teaching in Gardiner for twenty-seven years. RALPH E. ROBBINS, principal of the Highland Avenue School, has been chosen to succeed Mrs. Bussell.

Deaths

RAY FUNDERBURK, superintendent of the school system of New Hanover County and president of the North Carolina Education Association, died at Durham, N. C., at the age of fifty. Mr. Funderburk had been ill for more than two years.

DR. B. W. DEBUSK, professor of education at the University of Oregon, died recently after a brief illness.

HAROLD R. KNAPP, principal of the Sea Cliff High School, Sea Cliff, N. Y., died at Central Square, N. Y., on August 1.

SISTER MARY ROSINA FLYNN, principal of St. John's High School, Paterson, N. J., for twenty years, died recently after a brief illness.

ERNEST ROSE, principal elect of Crockett Mills High School, Crockett Mills, Tenn., died after a short illness. He was twenty-seven years old.

Supervising Principals

LEROY T. BLACK, former assistant county superintendent of Butler County, Pennsylvania, has been appointed supervising principal at Evans City, Pa.

H. Scott McHenry, principal of the high school at Bridgeport, Pa., has announced his resignation from that position in order to accept the office of supervising principal of schools at Pemberton, N. J.

ALFRED R. EVERETT has been appointed supervising principal of the elementary and union high schools at Boulder Creek, Calif., to succeed GEORGE L. GORDON.

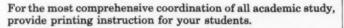
W. W. ESHELMAN, principal of the Shohola Township Consolidated School, Pike County, Pennsylvania, has been elected supervising principal for West Potts Grove, Pa.

C. F. Dengler, supervising principal of the school system at Palmyra, N. J., for the last six years, resigned July 1.

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NOTES FOR BUYERS ...

Desk Work

If it pleases you to be a good fellow as well as a good superintendent, drop a line to the Crane Co., 836 South Michigan Avenue, Chicago, and ask for the new Crane Kitchen Guide.

This can be done without sacrifice of your royal dignity, for the kitchen has become a scholarly province, we would have you know. The proof of the pudding is no longer in the eating but in the desk or planning unit. Every kitchen has its desk, and when the planning unit comes in at the door, the old by-guess-and-by-golly cook flies out at the window.

For a three-cent stamp you will thus win the affections of the home economics staff and the cafeteria manager. This Crane booklet will be just good clean fun for them, with its floor plans and photographs of model kitchens, its list of the latest appliances, its dimensional drawings and — neatest of all — its work sheets for laying out the old kitchen and redesigning it along modern lines — not omitting the planning unit.

Who's There?

Knock, knock! Who's there? Tobias. Tobias who? Tobias A. Squires. It's that radio and parlor game just a little less or more looney than "handies."

Seriously, though, if we are smart we won't let opportunity knock more than once before we open up for "to buy us a Squires." Squires—205 Ross Street, Pittsburgh—makes inkwells, inkwells that are sturdy products admirably suited to school use.

The Dittoes Ditto

If we remember right (and we do for vital statistics are just so much meat to us) it was only last January that we announced a little newcomer in the Ditto family.

Now in September, Mr. and Mrs. Ditto are again receiving congratulations. Can it be that these prolific parents plan to establish residence in Canada in the hope of winning that great "birth of a nation" contest going on up there?

The newest Ditto is destined to be Teacher's Pet from the first day he hits school. He's about the cutest trick of the year, that little fellow. His consideration is so small (only three-ninety-

five) that he could come right out of the teacher's own pocket. So quick and active is he that he is going to win the teacher's allegiance away from Hectograph, whose capabilities are more limited. The newest baby—they call him Film-o-graph—is a genuine Ditto; he consumes the same films and is keeping things more than lively around the home place, Harrison and Oakley Blvd., Chicago.

Tables for Ladies

Peanut butter sandwich, hard boiled egg, ginger snaps and a red apple—that was our school lunch for the first eight grades. Of these only the apple has any place in our present affections.

It's all so different now that the school has gone into the lunchroom business. The other day we visited a new junior high and inspected the kitchens and cafeteria. There was actually something emotional about the experience. The shining expanse of stainless steel counter that stretched across the great lunchroom, swirling into a great curve for cashiers and checkers, and then breaking out again intermittently in kitchen and dishwashing pantry, was a sweet sight.

Our hard boiled eggs had come from a shining kitchen, too, but one that shone from laborious scrubbing and constant polishing. This kitchen and lunchroom gleamed with the very minimum of maintenance.

It's a little sad to reflect that many school kitchens and cafeterias are exactly as inconvenient and by no means as attractive or sanitary as our mother's country kitchen of a generation back. Isn't it high time that school executives look in on a really modern cafeteria set-up, such as the one we visited? It was equipped by that manufacturer of stainless steel food service equipment, S. Blickman, Inc., Weehawken, N. J.

Bookkeeper's Lament

A poor nut I am, slaving on this high stool far into the night, making out the payroll. Why do I do it? So other folks, better paid than I, can make whoopee far into the night on other high stools. Are the stools at bars and soda fountains as hard as the one I perch on? Not so as you could notice it! Here I must sit till my rump callouses over just because the big boss has got calluses on his mind. With one of those Burroughs

machines all these records and checks could be done during office hours.

When I mentioned Burroughs to the old boy the other day, he thought I meant the man that loved the birdies, bees and flowers. I asked him straight had he ever heard of a Burroughs automatic check writing machine? Naturally, says he, but they are only for the very largest school systems. Heck, I said, the Burroughs outfit has got a payroll plan for any size business or school system either.

Well, he looked sort of surprised at that—at me telling him something. I could tell him plenty he'll never know about business machines, things that would save this town enough money to boost the bookkeeper's salaries and the teachers' too. He asked next day if I had a folder about these payroll machines, and was I laying for him? Mr. Perkins, I said, just write to the Burroughs Adding Machine Company, Dee-troit, and ask for Form 7067.

Open Secret

We didn't promise not to tell and perhaps you have heard already. All-Steel-Equip Company, Inc., of Aurora, Ill., has acquired the management of the Aurora Metal Cabinet Company. So now, in addition to A. S. E. lockers, you can buy Aurora steel filing equipment from this big Illinois locker house. The company has a large range of steel shop equipment as well. Business is fine, it seems, and a new Detroit office has just been opened with H. L. Breitenstein in charge. Thought you'd be interested for they are such nice people to deal with.

Sanders on Your Mind

In size they are considerably larger than vest pocket yet decidedly smaller than portable. For sad experience with things portable teaches us that to be able to port the portable you must border on the husky.

It's "take-about" sanders we're referring to, although you couldn't have guessed it unless you are a maintenance man or woodworking instructor with sanders on your mind. There are some 2,000 schools, we are told, that do not need to have sanders on their mind, for the sufficient reason that they once bought a Porter-Cable take-about and now they can put their minds to other tasks.

In addition to use on floors and desks and in the school shop, the Porter-Cable Machine Co., Syracuse, N. Y., recommends its take-abouts as a complexion cure for slate blackboards; it takes away that greasy look.

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"Not less than 14.25% and not more than 15% silicon. Total carbon content below 1.12% and above .50%. Manganese below .50%. Sulphur below .05%.

"High silicon cast iron pipe and fittings for acid waste and acid vent pipe shall be of the thickness, etc., corresponding to extra heavy soil pipe and fittings unless otherwise approved."

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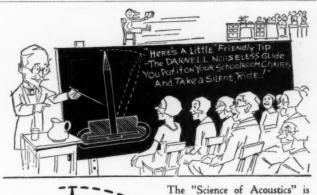
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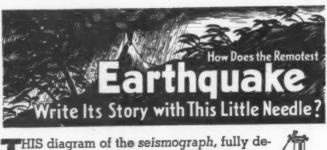
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THE BOOKSHELF . . .

HEARST: LORD OF SAN SIMEON. By Oliver Carlson and Ernest Sutherland Bates. New York: The Viking Press, 1936. Pp. xv+332. \$3.

Clear-cut and singularly vivid vignettes, the total comprising a biography of the great psychoneurotic of American journal-ism—William Randolph Hearst. Here there is no mincing of words or sparing of feelings. The author drives to his point in attempting to explain this many faceted human phenomenon. Hearst is portrayed as he really is—a fundamental anachronism in a democracy and an enemy of public education. When the reading is finished there is nothing remotely resembling greatness, even little that is admirable in the hybrid lord of San Simeon. Every member of the teaching profession should read this book.

HOUSING OFFICIALS' YEARBOOK, 1936. Edited by Coleman Woodbury. Chicago: National Association of Housing Officials, 850 East 58th Street, 1936. Pp. x+244. \$2.

The second yearbook in a relatively new field—housing. Summary report of the year's activities, with a supplementary bibliography.

FORTY YEARS OF PSYCHIC RESEARCH. A Plain Narrative of Fact. By Hamlin Garland. New York: The Macmillan Company, 1936. Pp. viii+394. \$3.

For more than a generation this well loved author made consistent researches in an area of abnormal psychology and—after summing up the evidence—came out by the same door he entered, no more certain than before!

The Rhythm Book. A Manual for Teachers of Children. By Elizabeth Waterman. 54 pages of music edited by Martha E. Ream, composed by Katherine Rhodes, Beatrice Hellebrandt, Martha E. Ream, Jean Hedemark, and Kathryn Trout. New York: A. S. Barnes and Company, Inc., 1936. Illustrated. Pp. ix+150. \$3.60.

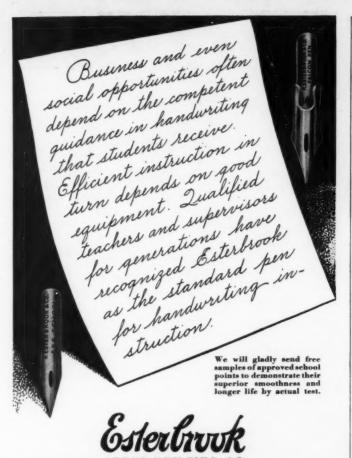
If one agrees with the fundamental premise upon which this book is written, a premise that a basic rhythmic movement experience acts as the common transfer element into art forms, then one seizes this book with avidity as a fine example of a seemingly successful attempt to put this concept to practical teaching purposes. The book is concise, lucid and well organized with charts and illustrations, teaching devices and music, presented in a well written text and an attractive format

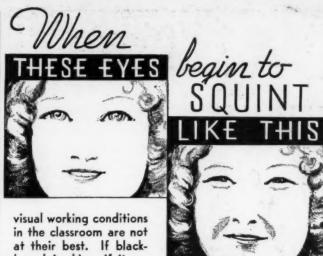
THE BROWN NETWORK. The Activities of the Nazis in Foreign Countries. Anonymous. New York: Knight Publications, Inc., 1936. Pp. 309. \$3.

For those who enjoy night reading of detective stories we advocate this illuminating piece of writing as more thrilling and more informative as well. Kidnapping and master spying! The scope of Nazi organization and propaganda beyond the confines of the Vaterland is amazing. American teachers should familiarize themselves with the nature of this propaganda. Apparently the author was so convinced of its sinister nature that he preferred royalties to publicity.

LIVING TOGETHER IN A POWER AGE. By Samuel S. Wyer. New York: The Association Press, 1936. Pp. vii+231. \$2.50.

Another engineer rises in the audience and points out the way to economic salvation. Successively, however, beginning with the Technocrats, these planning engineers are becoming more conservative and seek to plot a path along the lines of our fundamental traditions. This volume is an expansion of a much more condensed plan first produced in pamphlet form in 1933. Simply written, easily understood. Recommended for professional reading.





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Foundations of Curriculum Building. By John K. Norton and Margaret Alltucker Norton. Boston: Ginn and Company, 1936. Pp. x+599. \$3.

Presents overview of the field of curriculum building for the elementary school. This material is presented against the authors' background of educational philosophy. Contains a wealth of material in convenient form for study.

MARKETS AND MEN. A STUDY OF ARTIFICIAL CONTROL SCHEMES IN SOME PRIMARY INDUSTRIES. By J. W. F. Rowe. New York: The Macmillan Company, 1936. Pp. ix+259. \$2.

Much has been said and done in these depression years in the way of artificial controls in primary industries. An English economist presents here some of the significant facts concerning control schemes in coffee, wheat, sugar, cotton, rubber and tin. He offers no final solutions but does clarify a number of misconceptions.

STATISTICS FOR STUDENTS OF PSYCHOLOGY AND EDUCATION. By Herbert Sorenson. First Edition. New York: McGraw-Hill Book Company, Inc., 1936. Pp. viii+373. \$3.50.

Clarifying explanations precede, and illuminating interpretations follow, the simple yet precise presentation of statistical concepts and techniques. There are chapters on the scope and need for statistics and graphical representation, on the usual measures, and on percentiles, skewness, regression, sampling, unreliability and correction for attenuation.

THE WINSTON SIMPLIFIED DICTIONARY FOR SCHOOLS. Edited by Thomas Kite Brown, Jr., Ph.D., and William Dodge Lewis, Pd. D., Litt.D. Philadelphia: The John C. Winston Company, Winston Building, 1936. Pp. 1,004; 1,729 illustrations, including 10 full-color plates. 24 pages of colored maps. 46,000 terms defined. \$1.28. \$1.52 with thumb index.

The real contribution of this new dictionary lies in its new, simplified arrangement. There is only one word list—a single, all-inclusive list which contains not only the ample vocabulary but also geographic, historical, Biblical, mythological and literary names, as well as abbreviations, prefixes and suffixes, and common foreign words (46,000 terms in all).

Just Off the Press

THE RISE OF MAN THROUGH HIS HANDIWORK. By David Reisz. Cleveland: Better Education Association, 7808 Quincy Avenue, 1936. Pp. 36.

ABSTRACTS OF GRADUATE THESES IN EDUCATION. TEACHERS COLLEGE, UNIVERSITY OF CINCINNATI, 1931-36. Volume II. Compiled and edited by Carter V. Good and Gordon Hendrickson. Cincinnati: Teachers College, University of Cincinnati, 1936. Pp. xix+249. \$2.

A World of Our Own. By Mary Graham Bonner. Illustrated by William A. Kolliker. New York: E. P. Dutton & Co., Inc., 1936. Pp. 119. \$1.50.

PABLO'S PIPE. By Frances Eliot. New York: E. P. Dutton & Co., Inc., 1936. Pp. 48. \$1.50.

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the Stanford University school of education tells what to do with

Side Glances -

PRESIDENT David
L. Crawford of the University of Hawaii
will tell in the next issue something of
the educational system in that territory.
It is all quite in the American manner,
with certain improvements. Notably
these: Rural teachers are paid as well
as city teachers. Rural children are as
well schoolhoused; the term is as long,
and the curriculum — although different
—is equally good.

DO YOU find it a little confusing that Colorado is in Texas and that there parents punish naughty children by keeping them away from one of their lessons?

It will all be cleared up in the November issue by Octavine Cooper of Colorado, Tex., who will describe a touch typing activity in the elementary school. Small Sister or Brother so loves to work at the typewriter — there being strict orders preventing the use of machines for play — that to be denied the privilege is a punishment that fits any crime.

OHIO'S largest senior high school is West Technical of Cleveland. This school has had a public address system for four years and has worked out its maximum utilization. How it makes use of the set-up in home rooms, auditorium, special classes, athletic field and school entertainments will be described by William B. Levenson, director of radio activities, in the November issue.

THIS has a sinister sound but really is a noble enterprise. There are places in this country where public school teachers, under pledge of secrecy, steal into the homes of citizens

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retarded readers.

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and there instruct pupils individually in subjects not publicly discussed. For what grown man or woman wants the public to know that he cannot read or cannot write. He is ashamed to come to school classes; his neighbors, perhaps even his own spouse, do not know the full extent of his ignorance.

Many communities are making great progress in eradicating adult illiteracy by tactful management, while in other localities the problem remains almost untouched. Frances Ross Hicks, associate professor of education, Murray State Teachers College, Kentucky, in the November issue will present the subject in an interesting manner.

RE many bad boys bad because it is something in which they can excel? That is one theory. The average school has too few recognized avenues of achievement. Not every pupil can find a form of self-expression recognized by himself and his class as something that contributes to and justifies his place in the school community. If he cannot, he is likely to be a social hermit.

The correction of nonsocial attitudes in children is an individual problem, but Rolland H. Upton, district superintendent of Buena Park School District, Buena Park, Calif., has ideas about how the school can discharge its responsibilities to social hermits, to be expressed in an article for November.

SCHOOL cafeteria and a faculty tea room at Nutley High School, Nutley, N. J., used to be operated commercially. Now girls who register for a course in institutional management prepare and serve the food and manage these lunchrooms. The course is an elective, open to girls who are interested in becoming dietitians, waitresses, counter girls, tea room operators, nurses, cashiers. Pupils in the accounting department are responsible for the bookkeeping and records. Margaret Kennedy, formerly director of the cafeteria, relates the plan in an article, "Lessons From Food Service," scheduled for early publication.

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LOOKING FORWARD

Open Air Schools

For nearly a generation the open air building has been used under different climatic conditions in an attempt to provide a more adequate adjustment of physical environment for anemic children and those of low vitality. Accompanying the use of the open air school have been other fundamental adjustments with respect to exercise, rest, food and a generally modified instructional program. The belief in the inherent values of the open air building was at least twenty years ago sufficient to bring about the adaptation in regular buildings of special open window rooms.

After this long period of use a fair question would be how valid this practice has been. Have the results achieved been worth while? Are the additional plant expenditures per child justifiable? One looks in vain through a vast array of educational literature for the answer. As a result of an emotional, sometimes excessively sentimental, attitude toward the education of the exceptional child, few administrators have apparently cared or dared to explore this area objectively.

Questions concerning the desirability of the practice are frequently met by references to superintendents' annual reports. Study of these reports gives some data on gains in weight, increases in vitality, educational progress and restoration to the activities of normal life. Rhetorical descriptive passages, apparently written by the earnest and enthusiastic teachers in charge, directly or indirectly credit all these gains to the open air treatment.

After such reading the immediate question arises why, if it is so successful, the open air idea has not been extended to the regular school plant. On one hand exists praise of the treatment; on the other, the quick elimination of even outdoor recess for normal children when the weather turns really cold. These apparent inconsistencies are explained partially by the fact that no one really knows how effective open air practices are.

Discussion of the topic with school executives discloses wide ranges of opinion. Some believe that the modified educational program operating without the nervous pressure of attaining standards, plus rest and good food, is responsible. Others incline to the view that the open air enthusiasts are right, despite the fact that many of these buildings exist in sections of our cities where the soot-laden air is anything but pure. Others merely accept the situation without comment.

There are several important reasons why administration should know the truth. At present and in the future many expensive buildings must be provided. If the open air idea has the real validity assumptively attributed to it, it should be incorporated in these plans. If its attributed value is merely a feeling and not a fact, then other paths are open. In recent years rapid strides have been made in air conditioning of buildings by mechanical means. Quite possibly this new development has all the advantages of the open air or open window rooms with none of their disadvantages. If food, rest and modified programs are the vital factors, then the application of these newer mechanical devices may offer an effective solution.

At present all is conjecture. No one really knows. Certainly this area should offer productive opportunities for real research. It should be fully explored.

Stop the Amateurs

The field of psychology has and will continue to make notable contributions to the advance of the methodology of education. While this discipline is fundamental to the educational process, just as are biology and sociology, it must not be overlooked that as a science psychology is still in its infancy. It has few areas of even relatively final knowledge. Its findings must therefore be used educationally with considerable caution. Within its limits there exist many unexplored and twilight phases which, in their practical application, are still safest when delegated to the better trained specialized physician—the neurologist and psychiatrist.

The field of psycho-analysis probably belongs directly in this category. Attempts by so-called progressive schools and colleges to permit free rein to Freudianstimulated psychologic workers who try to carry psychoanalysis into diagnostic work with children are bound to result in the overstepping of bounds of proved knowledge for ventures into ill advised conjecture and incompetent experimentation. Much of it degenerates into meddling with parental relations in areas in which the school has no business. Much of its application is bound to affect the child adversely. It is also likely to create difficulty, suspicion and misunderstanding on the part of the community.

The cocksure amateurs in this twilight psychologic zone should be carefully restrained by administration before they accomplish too much damage. The typical "expert" in this field appears to differ from the traditional fortune teller only insofar as he is protected by the magic of a higher degree and a teacher's certificate. Psychologic extremists have about as much authority and validity as other professional mind readers.

This caution respecting unexplored and unestablished areas must not be construed as a criticism of that group of sane and sensible workers who are attempting to apply rational knowledge of the Psyche to the process of diagnosis, guidance or instructional method. Their work is generally good and sound within the limits of present day knowledge. Rational application, rational psychologic knowledge is extremely desirable.

Rating Principals

E ver since the development of rating methods in personnel management, there have been strong arguments for and against their use. To many teachers the heavily subjective methods for determining efficiency of teachers has been one of the devices that, under the guise of increasing efficiency, has been punitively used by administration. To others the method rather than the idea of rating has become obnoxious. There are also many who feel that the mechanics and techniques of industrial personnel methods have little if anything in common with the teaching process and should be discouraged.

Administration, on the other side, has generally adopted teacher-rating techniques of various types and validity as a means of improving the heretofore completely subjective means of determining teacher efficiency by unwritten ratings which found expression finally in recommendations for promotion or dismissal. Admitting the crudity of most scales and methods, administration sought in them a better method than the one previously employed.

It is doubtful whether the general charge of the use of rating scales as punitive measures can be sustained in city school systems. Too few teachers are discharged for incompetency annually to make such contention valid. In smaller areas, the mortality of teachers does not appear to be as great since the use of rating scales as before. From these generalizations, the emergency of the depression must be subtracted. Here the reduction of personnel owing to lack of funds, while theoretically resulting in the elimination of inefficient teach-

ers, was in reality based more upon principals' recommendations than upon the results of any rating system.

The problem administration faces may be condensed in the statement that the state and professional responsibility demands the elimination of the grossly incompetent teacher who has no possibility of improvement. One of the jobs of personnel management is to discover weaknesses in teaching personnel and attempt to correct them in the interests of better education. There are two methods of correction, elimination and in-service training. The able administrator believes that diagnosis, aid, special training and helpful supervision are much more valid than ruthless elimination. After all, the state has spent respectable sums of money on the training of prospective teachers. This social investment should be salvaged whenever possible.

Good practice in personnel management considers the practice of efficiency ratings as gross diagnostic measures through which improvement may be accomplished. Rating so used is not only a valid but also an extremely useful technique, despite its many lamentable weaknesses. It is much better than the older method of mental decision entirely subjective and without a common base, just a principal's private opinion very privately expressed. Possibility of review under these conditions is remote.

Even here, however, the teachers have a valid basis for criticism. Except in the smallest school systems, the principals make the initial rating of teachers. This building rating is transmitted to the central office where it becomes a part of the general personnel record. To protesting teachers superintendents in many instances declare that these ratings are indicative rather than final in character. Yet, as years go on, the lack of their validity is forgotten and their importance increased because of the authority given to written records.

How may this weakness in rating be corrected? Apart from possible improvement in rating systems, the request of teachers that the principals should also be rated is passed without much consideration. Few superintendents are willing, let alone eager, to run correction ratings on principals. Yet the development of a check rating on principals and the reinterpretation of individual teacher ratings on the basis of this correction rating would do much to satisfy the righteous complaints of classroom teachers.

Principals vary in their rating skill to the same degree that teachers vary in ability. Age, training, social background, temperament, professional skill and many other differences are reflected in the rating of teachers under their direction. Teachers know this to be true and so do superintendents. It is mechanically possible to determine these differences and make allowance for them. The result, while initially disturbing to principals, would in the long run give the teachers a much better chance and might remove many of the conflicts existing in this aspect of personnel management.

Correspondence Courses—II

THE movement to overcome curricular deficiencies in small and even medium sized secondary schools by delegating through correspondence courses the control of certain subject divisions to state institutions of higher learning or voluntary associations should, as stated last month, be appraised in light of the fundamental administrative principles involved.

Seven general principles were offered as a basis on which to judge this new movement. The application of these principles leads to certain generalizations which boards of education and executives should study carefully before taking action. Let us consider some of these questions:

When the alleged basis for the introduction of these outside controls through correspondence is the inadequacy of the existing secondary institutions, is the assumption of remedy through correspondence courses in accord with the fundamental principles of public education?

Is the voluntary delegation of a part of the public secondary school curriculum through correspondence courses to either public or voluntary outside agencies legal? Is it desirable? Is it a safe policy for public education?

Does the admission of incompetency of the legally accredited secondary school teaching staff to prepare specialized curriculums in the vocational field, or give specialized courses in vocational education, offer a valid reason for delegating partial control of secondary education to outside agencies?

Does it seem logical that the same incompetent teachers, allegedly used as a reason for correspondence courses, can, after the adoption of correspondence courses, become effective as diversified supervisors of the same courses?

Is this first step not the possible development of an ultimate instructional policy that may have disintegrating results for public education? Does it not offer serious threats to the concept of a democratic public school system?

If this procedure is promulgated on the grounds of more efficient and cheaper instruction for the vocational division of the curriculum, what can prevent the ultimate inclusion of correspondence courses in other curricular areas?

Is the subjective general blanket reason that "these courses are doing the children good" a valid reason upon which to proceed to the invalidation of the principle of free schools under popular control?

If a delegation of legal authority is given correspondence schools, what is to prevent the publisher of textbooks from insisting upon his right to construct the course of study around his specific publications?

If this delegation of educational authority can be legally made, what is to prevent special interest groups in their pressure aspects from organizing similar instructional programs and insisting upon their share in the program?

What is to prevent religious groups from introducing correspondence courses in sectarian religion (disguised as ethics or character building) into the curriculum?

Are state supported or privately owned universities proper agencies to project their influence and finally *de facto* control into social public education?

Granted that correspondence work is admitted by the state to be a necessity in certain cases of isolated groups in submarginal or inaccessible areas, should not the state department of public instruction within each state accept this legal and moral responsibility and furnish the service without recourse or delegation to those agencies which are legally outside of the public school organization?

Should not the present haziness and confusion between correspondence courses for out-of-school adults and children within the limits of public secondary education be definitely clarified?

All of these are fair questions that the thoughtful student of administrative practice must study in relationship to the glamour, ballyhoo and pressure which have come to form so perfect a part of the educational technique for introducing new things. A serious study of their possible implications should lead even the most enthusiastic supporter of these correspondence courses at least to pause. American public education needs some straight and clear thinking!

Federal Aid

The identical bills to provide federal aid to the states for public education, in the amount of \$300,000,000 annually after the fifth year, introduced into the second session of the seventy-fourth Congress by Representative Fletcher Brooks and Senator Pat Harrison, are to be revived in the seventy-fifth Congress by their originators.

This is the bill sponsored by the National Education Association. In many respects it is by far the best bill yet developed. It provides the essential guarantee that the money is to be appropriated to the states on a census distribution, ages five to twenty, inclusive, and is to be spent by the states for public education according to their own pleasure and program. Each state is even permitted to make its own annual audit. The commissioner of education is not empowered to interfere with the educational purposes for which the money is spent. He must only be assured that the money has been spent for educational purposes. No equalization feature is provided.

The Editor



Youth Trains for Service

By THOMAS W. GOSLING

HE Junior Red Cross, which is essentially and fundamentally an organization for education, draws its membership from public, parochial and private elementary and secondary schools. Its chief objective is to stimulate its members to engage in activities which, in the broad sense of the term, are social in their nature and which may reasonably be expected in due time in each individual to produce the social mind. The phrase "the social mind" is a brief and convenient designation of those attitudes and ideals which impel one, in everything that he does, to give generous thought to the rights, the interests and the highest welfare of others.

The social mind has not been an outstanding characteristic of the majority of our fellow citizens. In spite of the noteworthy benefactions which have built and endowed hospitals and colleges and which have established

and maintained other eleemosynary institutions, the historians who in the future with adequate perspective write the account of the first years of the twentieth century will be forced to record the many antisocial practices which found expression in graft, in the waste of national resources, in crimes of cupidity and of violence, in greed and excessive acquisitiveness, and in the exploitation of human lives for individual gain. These are a dark blot upon our escutcheon. They tend to dim considerably the brilliance of the many achievements that indicate the high potentiality of the mind of

The Junior Red Cross is the principal coadjutor of the schools in developing the social consciousness of pupils. Opportunities and incentives for participating in social service activities are provided in the widest variety of forms suited to the differ-

Three Red Cross juniors are engaged in making an afghan for a veterans' hospital; it is to be hoped the veterans will get as warm a glow from it as the young weavers. Below, a dental clinic in Greece supported by contributions from the National Children's Fund.



ent ages and capacities of the Junior Red Cross members. We begin with pupils of kindergarten age, since it is important to stress the point of an early beginning. It is difficult to change long established habits and to substitute after many years social for antisocial attitudes and ideals.

Even little children like to have a sense of participating in something real and of not always engaging in "make believe" activities. A report made by the principal of the Columbus School in Rome, N. Y., just after the spring floods, illustrates the wish to serve which most children have. "On Monday, March 23," says this principal, "the kindergarten children had many stories to tell of the floods. Their teacher told them of the work of the Red Cross, and that people who wished to help were giving money to this organization. Two little girls who had pennies to buy candy on the way home asked if they could give these to the Red Cross. The next

This trailer carries first-aid equipment to fairs and public gatherings. Boys of the Scott High School, Toledo, made the blue print and they offer it and construction details to other chapters. Below, Dallas juniors are binding Braille books for use in a school for the blind.

morning many more brought 'candy pennies.' When the teacher suggested a sale, the children were delighted and wished to start at once. So plans were discussed; kites, pinwheels and oven holders were made and sold. As a result, more than \$4 was turned over to the local Red Cross Chapter."

Junior Red Cross activities can be developed without heavy cost. The financial aspects of the program are subordinated to the social service purpose. Almost always, however, where there is a will there is a way



to raise the small sums needed for a particular activity.

At the top of the school ladder of which the kindergarten occupies the first rung is the high school. Obviously on account of their age and wider experience, high school pupils can undertake more difficult projects than would be possible to young children. The following report of the flood disaster in Concord, N. H., in 1936, shows how a high school Junior Red Cross group can be of great help in a time of community need.

"In 1931 a survey of local disaster hazards and resources was made by the members of the Junior Red Cross of Concord High School and in 1934 the survey was revised and brought up to date. The chief purpose of this survey was, of course, to collect all information that would be of use if disaster should strike the community. The most important result of this survey was that it made all the Red Cross organizations of the city aware of the actual possibility of disaster.

"A short time after its completion the senior chapter had organized a disaster committee. On March 20, 1936, the Merrimack River overflowed its banks and reached an all-time high level destroying homes and property. The committee immediately went into action, working day and night to care for the needs of those who had been made homeless and destitute by the flood.

"The preparation of the survey also spurred the Red Cross Graduate Club and the Junior Red Cross to prepare themselves to act efficiently should disaster come. The members of the Graduate Club attended a





Part of international correspondence activities is the doll exchange, this outfit being from Japan. Below, juniors of Franklin County, Ohio, are packing Christmas boxes for children of injured miners.



staff assistance course, which gave them more complete understanding of the Red Cross aims and policies, and in the emergency they served in the booth where donations were collected, helped to sort clothing, assisted in the chapter and state offices and cooperated in every way possible.

"The Junior Red Cross of the Senior High School had already organized a disaster corps committee similar in form to the senior disaster committee, with each of its committee chairmen a member of the corresponding senior committee. When the emergency came, both these younger groups were ready and gave the fullest cooperation.

"In the recent disaster, there were really two floods, the second being much more destructive than the first. After the first came, a group of nine boys from the Junior Red Cross of the high school made another survey of every house in the areas affected by the flood, getting such information as the number in the family, number of families forced to leave their homes, whether or not they were forced to leave quickly, a rough estimate of the extent of the damage done, whether or not there was a loss of livestock, and whether or not there was sickness in the family. This report gave the chapter invaluable information for use when the second flood came,

"As a result of the survey made in 1931 a list of resources was put into the hands of the various subcommittees which had been set up by the senior disaster committee. The map which had been made showing the probable flooded districts proved to be an accurate forecast of the areas actually affected, and therefore attention had already been centered on those areas before the peak of the flood was reached.

"Therefore, the survey which was made in 1931 and revised in 1934 seems to have had a two-fold value: first, it stimulated the interest of all Red Cross groups in the community to organize for possible disaster service, and second, it furnished valuable information for the use of the senior

chapter when the emergency actually arose."

Typical service activities of members of the Junior Red Cross will indicate the general character of the program. There is no attempt to standardize activities. Each Junior Red Cross unit is free to do the things that seem most appropriate and challenging in its own situation. In schools in which student clubs occupy important positions, sometimes these clubs will undertake special Junior

testifies to the interest that school authorities have in the program. In the past year alone on the basis of preliminary figures the estimated increase is more than 1,000,000 members, bringing the total to the astounding figures of 8,000,000.

Contributions to the National Children's Fund make it possible for the juniors in any chapter to extend their benefactions far and wide. Appropriations from the fund supply collections of books to disadvantaged

I SERVE

Members of the Junior Red Cross in Erie, Pa., inspect and pack boxes of Christmas gifts for veterans in a government hospital.

Red Cross projects. Frequently Junior Red Cross activities take the form of service to hospitals and to men in national service. Of great significance is the preparation of Braille materials for children in homes for the blind.

Surveys of the social resources of the community have been made in several places. Conspicuous work in the survey field in Omaha, Neb., Council Bluffs, Iowa, New Orleans, La., and Fort Smith, Ark., has been done. A remarkable service in supplying needy children with shoes and clothing necessary to enable them to attend school has been rendered by the Juniors of Albany, N. Y.

The rapid growth in membership in the American Junior Red Cross schools in out-of-the-way locations; replace school books lost in flood or tornado; provide play and recreation for the purpose of restoring morale to children who have experienced a shocking disaster; furnish glasses, crutches and surgical treatment when parents cannot afford to supply them.

The National Children's Fund supplies also the appropriations that make it possible to offer to foreign Junior Red Cross Societies limited subventions for the promotion of work with children in foreign lands. In this manner, as well as through the exchange of letters and albums, and through the gifts of Christmas boxes to foreign children, our American Juniors are helping to build under-

standing and good will among the nations.

Without understanding of other peoples and other cultures, without sympathy, good will, justice and fair dealing, and peace as the by-product of all these, all local and national efforts for the amelioration of the human lot might prove to be unavailing. All might conceivably be destroyed in the dread holocaust of war. The American Junior Red Cross wishes to join hands in friendly service with the juniors of all the nations.

The Junior Red Cross program does not aim to produce trained social workers. It aims to develop through social service activities among the young a trained and widely diffused social intelligence. Our American people can be depended upon to respond adequately to any great emergency. Their contributions for the relief of the sufferers from the recent floods and tornadoes justify this confidence. Our social problems, however, are not always dramatic and stirring. Many of them require the steady, plodding and unremitting efforts of persons who are able to work without emotional appeal or dramatic challenge. Poverty, poor housing, low real wages, inadequate facilities for play and recreation, unemployment, sickness, delinquency and crime are problems that can be solved only by persistent, intelligent and sympathetic effort on the part of multitudes of socially minded people.

Youth in training for service through the Junior Red Cross! More than 8,000,000 members of the American Junior Red Cross are learning to recognize human needs and by finding ways to minister to these needs they are acquiring social intelligence for use in the grueling task of raising the standards of human welfare by bringing light to those who sit in darkness and by bringing relief to those who are distressed in mind, body or estate.

With the cooperation of the schools the Junior Red Cross is developing succeeding generations of young people to be prepared to meet social problems of all kinds with sympathy and understanding.

Watch Teachers Grow

With Each New Course Revision

By GEORGE C. KYTE

HE work of curriculum revision should be conducted as an important means for training teachers in service. When constructively directed, their activities become the highly professional type characterized by the dominant purpose of determining how to improve their teaching. This desire to improve instruction rests primarily on the intention of facilitating the sound learning of children. Consequently, any program of curriculum revision, rightly conceived, becomes an important factor in the professional training of school teachers.

In order to understand how this type of curriculum revision contributes to teachers' growth, we must first determine the nature of a good course of study. The well organized manual of instruction contains certain parts that are essential to the user, if he is to obtain from it the professional guidance desired. The divisions include: (1) educational objectives, (2) specific aims, (3) teaching procedures and (4) detailed guidance. These several parts may appear in the order in which they are originally developed or some other final arrangement of materials may be followed.

Stating Educational Aims

The first division of a course of study consists of the statement of aims and purposes of education expressed in simple and direct terms. The statement should be thus written so that it is understood by all who are to be guided by it. The formulation must be in keeping with the educational philosophy to be inculcated in the members of the school system and to govern all educational procedures. It will consist, therefore, of the school system's own cooperatively developed general aims. It

should be based upon other acceptable, constructive formulations such as the five-page statement of "The General Objectives of All Education," published in the Department of Superintendence Sixth Yearbook and "The Desirable Social-Economic Goals for America," treated in the January, 1934, issue of the Journal of the National Education Association.

The second division of the course of study contains the specific aims of the particular phase of the curriculum being developed. The specific objectives are to be stated in terms of definite goals or purposes in keeping with the general aims of education. The formulations may be, for instance, soundly stated purposes of early childhood education. They may be the fundamental objectives of the new elementary school or the specific objectives of the progressive secondary school. The specific goals may be developed with respect to definite purposes of some other division or smaller subdivision of a school sys-

An excellent example of this type of statement is to be found in the New York State Committee's 1929 report entitled, "Cardinal Objectives of Elementary Education." The "Point of View" in the California "Teachers' Guide to Child Development" illustrates another method of presenting specific aims. The statements for each grade in the "Tentative Course of Study for Virginia Elementary Schools" exemplify still another way of indicating the specific objectives.

The third division of the course of study consists of a description and exposition of sound procedures. This part of the manual should provide general but definite guidance regarding teaching and learning commensurate with the general aims and specific objectives. Furthermore, the treatment should be developed from the standpoint of normal and natural learning activities.

Three phases must be included, namely, (a) the effective utilization of the time that has been assigned for school use, (b) the educationally valuable experiences that are in keeping with the level of development already attained by the children and (c) the educationally sound learning activities that meet the known needs and purposes of the children. With respect to the third point, examples for teachers' guidance may have to be included in considerable detail for purposes of clarity.

Detailed Guidance

The fourth and last division of the course of study is the detailed guidance or the grade organization. It is the large section of the instructional handbook that furnishes specific guidance to each teacher regarding her particular classroom situation. All suggestions included in this fourth division must be in agreement with the general aims of education, the specific objectives and the nature of sound procedure. Three types of guidance should appear in this division. They are: (a) suggestive illustrations of sound procedure, (b) significant outcomes to be attained and (c) valuable instructional aids and materials.

In this fourth part of the course

This conception of curriculum building has as its sole purpose the maximum development of every teacher into the most professionally efficient person he is capable of becoming. The teacher becomes competent in self-analysis, self-appraisal and self-improvement by means of this in-service training. He grows professionally with each revision he helps make.

of study, many suggestive illustrations should be included in considerable detail. These concrete examples are type lessons that illustrate clearly how the learning of children occurs efficiently through real activities carried on by them under the teachers' guidance. Other learning activities will be presented in less detail to indicate to the teacher the possibilities of other efficient ways of learning.

The outcomes consist of the standards of achievement and other educationally sound attainments in keeping with the general educational aims and the specific objectives. Since the outcomes are the products of learning experiences, they include: (a) essential knowledges, (b) fundamental habits and skills and (c) right attitudes. An illustration of one of these three types of outcomes characterizing the sort of person to be developed will serve to exemplify the nature of attainment.

What Knowledge Is Essential

Essential knowledges to be acquired by an individual include "a progressive understanding of his total environment, an enlightened insight into its everchanging problems, an adequate knowledge of his duties and responsibilities as a member of it, and the essential information needed by him to meet the demands which he encounters in it."1 The analogous outcomes in terms of habits and skills and of attitudes are just as essential as the acquired knowledges.2

In order to guide children in their learning activities, each teacher needs detailed help regarding the references. supplies and equipment to be selected for use. These instructional aids and materials must be in keeping with the educational aims and objectives. Teachers' books, children's books, supplementary materials, instructional supplies, equipment, furniture and fixtures must be adaptable.

This brief analysis of the well planned and organized course of study indicates why curriculum revision should be a factor of in-service training for teachers of the new school. To some extent, it implies how the revision may be made a factor in professional growth. Let us turn our attention more intensively to this second important consideration-curriculum revision operating as a factor in the in-service training of teachers. It consists of carrying on the revision of courses of study as a constructive supervisory procedure. The steps in curriculum construction or revision indicate the most important phases of in-service training that are involved. They will be found to include all types of supervisory techniques conferences, meetings, bulletins, experimentation and the like.

The first step in curriculum revision is the stimulation of the personnel to a consciousness of the need for and the importance of the undertaking. In fact, the success of inservice training by this means depends markedly upon the care and thoroughness with which the initial step is taken. All members of the teaching staff must be aroused to the point of understanding the limitations of the course of study in use, of feeling concerned about its shortcomings and of desiring to improve it. Examples of the ways that the professional staff have been made deeply conscious of their needs and earnestly desirous of meeting them appear in the published accounts of curriculum revision.

One caution regarding the initial procedures reported should be kept in mind. No matter what procedure is followed - the instructional survey, the informative and inspirational lecture, the discussion involving staff participation - if the outside curriculum expert is employed in this step, or any step, for that matter, his rôle must be that of an adviser only. If curriculum revision is to be a growth producing in-service training program, the learners must be the doers. In order that the staff may grow professionally by making the revisions, the specialist's rôle is, therefore, that of a consultant.

Second Step Is Planning

When the professional staff is ready to undertake curriculum revision, the second step may be taken. It involves planning the procedure to be followed in making the revision. By the time step one has been completed, tentative plans for the procedure to be followed should also be completed. This formulation by the superintendent, or by the person he designates, makes possible the intelligent guidance of the personnel in their cooperative planning. Part of this activity will be done by representatives of the several types of educational workers employed and of the various kinds of schools established in the school system. Some means must be found, however, to provide for participation in the planning by all members of the educational staff. This phase is vital to a program intended to provide for the enlightened and purposeful growth of every person.

The importance of this point becomes more evident when we consider the next step to be taken. This third step consists of assigning and organizing the educational staff in the program of curriculum revision.

¹Kyte, George C.: How to Supervise. Boston: Houghton Mifflin Co., p. 43. ²Ibid., pp. 43-44.

Duties and responsibilities delegated to each person become meaningful and acceptable to him when he is thoroughly cognizant of his place and part in the work to be done.

The fourth step is the relatively long and slow one - directing the activities of the personnel in curriculum revision. Four large phases must be carried on by them intensively and thoroughly: (1) the cooperative development of a sound educational philosophy; (2) the development of specific objectives; (3) the determination of effective teaching procedures, and (4) the formulation of specific guidance needed by each teacher. Although the four phases generally occur in that order, any resulting tentative draft will undergo changes as the teaching staff grows through study, experimentation, work, discussion and similar activities involved in curriculum revision. A brief discussion of each of the four phases will illustrate this point.

Curriculum revision actually begins, therefore, with the cooperative development of fundamental educational ideals and purposes. teachers' study, discussion and restatement of educational objectives lead them to be cognizant of and in sympathy with a progressive educational philosophy. Hence, the changes thus wrought in their own operating philosophy of education will be the products of constructively directed self-effort. They will be seeking the answers to the question: "What are the educational aims that should govern our teaching?"

Agreeing on Specific Objectives

When the tentative formulation of a progressive educational philosophy is thus completed, the second phase logically follows: It has to do with establishing in each committee or group of course-of-study builders, agreement regarding acceptable specific objectives that are in keeping with the general objectives.

For example, a committee on the social studies or a committee on the third grade curriculum undertakes to determine the educational purposes to which they can subscribe with respect to the section of the learning program they are responsible for planning. The committee on social studies is endeavoring to determine the answer to the question: "Why must the social studies be given a place in the program of teaching and learning?" The committee for the third grade is trying to answer the question: "What specific goals and purposes must the teacher have in mind in making sound provision for the growth and development of children in the third grade?"

As the members of each committee progress toward a comprehensive statement of acceptable specific objectives, they will have found it necessary to square them with the general aims previously formulated. In some instances, there will be need for refinement or modification of the proposed specific objectives; in others, it will be necessary to revise the statement of general objectives. The growth achieved by the teachers determines, in part, which change in formulation must occur.

Now for the Third Stage

When the two formulations become consistent as well as educationally sound, the third phase of curriculum revision may be launched. It involves studying and agreeing upon sound procedures to be followed in teaching. This phase, when carried on effectively, requires considerable time. Furthermore, the best efforts of many members of the teaching staff must be utilized. They will determine criteria for selecting and using subject matter. They will determine essential experiences and their sequences, grade placements and time allotments. Similarly, the personnel will analyze and determine upon sound methods of teaching and learning. Synthesis will require the teaching staff to arrive at a common understanding of desirable natural learning activities. These activities will be couched in terms of units of learning, correlation, articulation and the like.

Although the tentatively accepted

section on classroom procedures, when tested against the general aims and specific objectives, will be in agreement with them, further testing through use is also essential. This type of activity consists of setting up and recording experimentation in the classroom and reporting the experiences and results in detail.

These culminating activities in the third phase of curriculum revision also result in products to be utilized in the fourth phase. It is easy to see how the results will contribute to this phase — to planning and building the specific major subdivisions of the organized teaching program. The reports of experiments, and records of classroom experiences also, constitute the large body of materials to be accumulated for furnishing teachers with the specific guidance needed. In organizing these materials, the course of study committee must appraise and select illustrations of teaching and learning. The committee will organize the illustrative materials so that they are readily accessible to the teacher. The committee must determine also the essential outcomes to he attained

If the course of study is to be totally helpful to the teacher, the committee will carry its efforts to the point of evaluating and selecting instructional aids and materials. It will formulate, therefore, the essential criteria for selection and for use of instructional means. In fact, it will also prepare lists of the most usable books, instructional supplies, equipment, furniture and fixtures.

Should Continue Indefinitely

The four parts, thus developed largely as the product of the committee's efforts, will become a tentative revision of the course of study. It will be a manual of teacher guidance released to the entire staff for experimentation and for appraisal. All teachers for whom it is intended and others will be drawn into these two types of activities. Representative laymen may now be invited to react to the proposed instrument of teacher guidance.

What's Next for Texts?

By GEORGE L. BUCK

THE purpose of this article is to present some group views concerning those forces that are regarded as beneficial and those that are regarded as detrimental to educational as well as to industrial recovery, and to suggest some procedures or plans which, it is hoped, may be judged as constructive to both fields.

The study was undertaken to obtain information pertinent and constructive to the part that the text-book plays in the scheme of education. Contribution to educational interests seemed appropriate, therefore, for many reasons, not the least of which was the desirability of fostering a reciprocal serviceable relationship between publishers and the educational world.

In order that the investigation might truly reflect industrial opinion, fifty publishers, representing approximately 95 per cent of the textbook business, were consulted. There was a 70 per cent response to a questionnaire which sought comments on selected influences aiding and retarding textbook recovery. This response revealed a consensus on four general aids to recovery and four general detriments.

One of the aids to recovery, distress buying, is concerned directly with increased textbook sales, but indirectly with deplorable school conditions. Insofar as the publisher is concerned, distress buying indicates merely an economic cycle. Insofar as the educator is concerned, distress buying indicates a nascent consciousness on the part of parents and teachers of the wretched condition of many books in use and of the real necessity for texts.

Some of the panaceas that have been proposed as a substitute for text-

books have not worked. The delusion that schools can get along without books has been punctured. Some newspapers have shown interest in developing a consciousness of the importance of the textbook and a goodly number of school journals have cooperated in publicizing this attitude. The whole situation surrounding distress buying gives rise to some interesting thought on the possibility of further enlightening school patrons,

The consensus of publishers is that there are four general aids to recovery in the text-book field and four general detriments. The president of Silver Burdett Company presents these group views, and suggests a research bureau jointly sponsored by schoolmen and textbook publishers.

that is, developing the public textbook consciousness.

A second factor aiding recovery has two aspects: (1) the greater and more widespread spirit of cooperation within the schoolbook industry and (2) between the industry and the educational profession. Publishers have consulted one another about common problems and have enjoyed giving and receiving such counsel. Educators have sponsored joint conferences for the discussion of textbook problems, and through this interest have aided the textbook industry. Also, in open territory, there

has been a sustained growth of the practice of school boards to delegate full authority to superintendents or their appointed committees to make all textbook selections.

In determining textbook selection, educators help to dispel the popular fallacy created by the political demagogue that important economies may be achieved through bureaucratic control of textbook purchase and selection. There is a growing disposition to recognize the harm that may come to schools from textbook selection and legislation based solely on the question of cost.

With the revival of general business in certain sections of the country, there has been developed a consciousness on the part of educators of the necessity for administrative rehabilitation rather than mere self-preservation or equilibrium. There is a definite trend toward replacing wornout instructional materials with new, up-to-date publications.

A vital factor retarding the recovery of the textbook industry is the increasing diversity of courses of study throughout the country. This diversity has created three problems for the textbook publisher.

First, it has created a demand for materials that some educators have met through encouraging teacher-prepared instructional material. This solution calls for serious consideration of the proved ability of the teacher to do authorship work, which must of necessity be produced in haste, with divided attention and with resulting impairment of efficiency.

Second, a diversity of courses of study has led to a demand for pamphlet material or material too brief to warrant economic production.

Third, it has developed a tendency to do away with basic textbooks altogether and to substitute for them a wide range of kaleidoscopic informational material, to be drawn upon by teachers as occasion requires.

Another factor retarding recovery is often an adverse reaction of the general public, because of false and hostile propaganda—that book trusts exist and operate to public detriment, that books are too expensive and that textbook manufacture and distribution should be confined to local industry.

A third general factor operating to the detriment of textbook recovery is the legislative attempt to produce restricted and inflexible price structures in a highly competitive industry.

Fourth, sales retardation has been due to restricted tax collections in free textbook territory and to depleted personal incomes in nonfree textbook territory.

This summarizes in general the replies to the questionnaire.

Framework Now Existing

It was suggested at the beginning that a plan of action might be developed that would assist both education and publication in the solution of some common problems. Before contemplating any future plan of action that may be suggested by the questionnaire responses, a brief survey of the framework now existing will show a valid basis upon which to build further organization.

In 1930 the National Society for the Study of Education devoted half a yearbook to "The Textbook in American Education." Educational progress was thus recognized as depending, to some extent at least, upon the textbook and therefore the textbook industry.

A few months later, a committee of three schoolmen and one publisher was appointed by the National Society for the Study of Education to implement the findings of the year-book committee by seeking in practical ways to improve relationships between publishers and educators and to lead the way to better methods of textbook selection and distribution. For two years, the annual meetings called by this committee for discus-

sion of common problems was sponsored by the National Society for the Study of Education. It was then arranged that the National Council of the National Education Association continue as the responsible guide for further similar conferences.

The conference is now called the Conference on Textbook Problems. It is arranged by a steering committee consisting of three publishers and three schoolmen, with a chairman who has continued in office from the beginning and has ensured the conferences consistency of purpose and genuine cultivation of understandings. The development of mutual understanding between publishers and educators is evidenced by the shift of emphasis in the topics chosen for discussion. In the earlier conferences, much discussion was devoted to the ethics of publishers but with the yearly growth of a larger educator attendance, considerations of more fundamental importance to the cause of education have been recognized.

With this short historical sketch as a basis, it will be seen that a cross-section industry view as shown by the questionnaire and a cross-section picture of the deliberations of the conference have much in common. There is a growing recognition of the interdependence of education and publication and a realization that problems common to one are pertinent to the other and that a pattern of action developed toward the solution of textbook problems could increasingly assist in the solution of certain educational problems.

What Is the Next Step?

Considered in the light of antecedents, what future course would the questionnaire responses suggest? If they are accurately interpreted, it would seem that there is a desire to find some wholesome answer to the problem of how publishers may best serve educational and public interest. One way might be through the continuation of conferences, sponsored by educators and participated in by publishers. Valuable as these conferences are, their value would be in-

creased were they assured of the availability of a fund of facts such as a statistical reference bureau might give. In other words, there might be developed a depository of classified facts, based on approved standards, which could be supplied on application to any member of the industry or to an educational organization desiring them. If such continuous activity were organized, as are the conferences, under joint educational sponsorship, it is reasonable to presume there could be acquired an organized collection of facts and principles that would be regarded as far more authoritative than any similar collection hitherto brought together.

Central Bureau Is Suggested

While there are today many diverse sources and methods for the compilation and circulation of information of the character referred to, there is no centralized agency whose authority is generally recognized to arrange, catalogue and supply this information. It is but reasonable to believe that some adaptation of textbook promotion might well be considered by those responsible for textbooks — publishers and educators. Some method of public enlightenment as to the proper type, place, value and relative importance of the textbook in the scheme of American education would seem to be desirable.

Jointly sponsored by educators and by the industry, a bureau organized for purposes of research and distribution should be free from any propagandistic charges directed toward it and should be in a position to reply to deliberately misleading propaganda occurring either within the field of education or of publication, or emanating from the demagogue with his familiar art of furthering selfish political ends by ranting about textbooks and textbook costs.

Such a bureau should aim to protect the legitimate joint interest of education and educational publications. At the same time it would serve to inform the public of the importance and educational value of good textbooks.



Parent, child and teacher viewing the child's graph at a regular conference.

In Lieu of Report Cards

By EDNA DURLAND, LYDIA LEISTIKOW

and CHARLES J. DALTHORP

THIS article is devoted to a discussion of an experiment in the elimination of the formal report card in the Garfield elementary school, kindergarten and grades one to six in Aberdeen, S. D. The plan in use in this elementary center has completed its second year of trial.

The plan is not original in its entirety and no claim to infallibility is made for it. It is an honest effort to give the parent a complete picture of the child's social, physical, emotional and mental development in place of the traditional formal sub-

ject matter report card which is ordinarily sent to the home.

The report to parents on a child's school progress should present a composite picture of the child's achievement in phases of his development. Merely setting forth the child's achievement in subject matter abilities or citizenship traits on a letter basis is at the best superficial and un-

reliable. The child may be able to secure satisfactory marks on subject matter abilities or citizenship traits and still have unsocial characteristics that will make him an undesirable member of a social group. With our changing attitude concerning the purpose of a report card it has become increasingly difficult to include intelligently all of the factors of a child's

TEACHERS CHECK SHEET

DATE	Dec. 2	Dec.5	Dec. 4	Dec.5	Dec.6
4:00	Eilers	Wilson	Brown	Logue	Mann
4:15	Peters	Lewis	Light	Green	Sands
4:50	Stone	Dyer	Finch	Blair	Grow
4:45	Harma	Втипа	Nelson	Gould	Lees
DATE	Dec.9	Dec. 10	Dec.II	Dec. 12	Dec. 13
4:00	Sime	Pearce	De Vine	Hook	Janes
4:15	Daniels	Hansen	Нурве	Parch	Hirsch
4:30	Snow	Fangen	Smith	Solberg	Nelson
4:45	Myers	Mullan	Loucks	Malcher	Winters

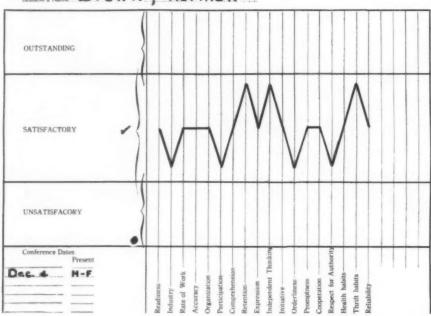
FORM FOR NOTIFYING PARENTS

Dear Parent:

Reports of the progress of children in the Garfield School will be given to the parents by the teachers in conferences in their classrooms. The time scheduled for you is given below. Unless we hear from you we shall expect you at the stated time. We hope both mothers and fathers will come.

	we hope both mothers and fathers will come.
Percet of Norman	Brown
Given by Miss La	rson
Day Dec. 4	
Time 4:00	
111116	· · · · · · · · · · · · · · · · · · ·
1be	present at the time designated.
will, will not	1

Student's Name Brown , Norman



Three of the forms that have been worked out in Aberdeen, S. D., in pursuance of the graph method of reporting school progress. The Aberdeen system, while not entirely original and not claimed to be infallible, overcomes many of the weaknesses of the formal academic report card.

development on the traditional report card.

Some of the major reasons for desiring the change in methods of reporting pupil progress were: (1) the growth in attitudes and behaviors could not be measured by the usual letter or percentage rating; (2) the old report card threw into active competition children of all types of abilities; (3) the child of low intellectual ability could never attain satisfaction achievement even though he worked to the limit of his capacity; (4) report cards sent into the home were frequently the cause of unfortunate comparisons in the family or in the neighborhood; (5) parents often commercialized marks by means

of intrinsic rewards; (6) parents seldom responded to a report card except to express dissatisfaction, and (7) justification of the marks given by the teacher was difficult.

To meet progressive tendencies in reporting school marks, Aberdeen has adopted for experimental purposes a plan for recording and reporting pupil progress to parents. The plan in use is a modification of conference, letter or check methods that have been tried in Omaha, Neb., Germantown, Pa., and Salt Lake City, Utah.

By this plan provision is made, we believe, for the success of children of low native ability. Children of high ability are stimulated to work to the limit of their capacities. Opportunity is further provided for a frank discussion of the child's progress, abilities and general behavior with the parent. Encouragement is given the child to improve his own record and competition is placed on an individual basis. Embarrassing situations that arise for pupils, parents and teachers when report cards are sent into the home are removed.

Parents are invited to the school for conferences four times a year. Prior to the conferences, graphs to be explained to the parent have been prepared by the teacher. Items whereby the child's progress is estimated are listed on the graph card. An estimate of the child's ability is shown by a colored graph line, a different color being used for each graph of the four conferences. By this plan a graphic picture of the child's growth tendencies is apparent.

A folder containing specimens of

the child's work for the preceding period is kept in the teacher's graph card file. This folder is shown to the parent to supplement the graph esti-

The first step is the scheduling of conferences by the teachers. The accompanying form is taken home by the pupil several days in advance of the conference. This arrangement gives the parents an opportunity to make their plans to meet the school schedule. Each teacher is provided with a teachers' check sheet upon which the conference schedule is listed. A maximum of four conferences with an average time of fifteen minutes to a conference are scheduled daily.

An examination of the graph reveals three areas representing three levels of ability: unsatisfactory, satisfactory and outstanding. The parent is appraised of the child's mental ability indicated by a check mark in the appropriate area. The brackets indicate roughly the following intelligence quotients ranges:

Outstanding, 120 and above. Satisfactory, 90 to 119. Unsatisfactory, below 90.

These intelligence quotients used are obtained by intelligence tests given in alternate years (grades one, three and five).

In order that the parents and teachers may be thoroughly familiar with the interpretation of the graph items, explanation sheets are presented to the parents at conference periods. The explanation is valuable to clarify items with more than one interpretation. The explanation presented to the parents is shown in the adjoining columns.

The question naturally arises as to the feasibility of this plan in a public school. The plan will work provided the parents of the school are given a voice in the adoption of the plan and have full confidence in the teachers.

Much of the success of the plan depends upon the teacher. She must be an individual who is in sympathy with the plan, who can meet the parents frankly on a common level and who has enough experience and good

Explanation Sheet for Parents

1. Readiness:

A. Mental:

Does he want to learn?

B. Physical:

Does he make a systematic approach to his work by having the necessary material at hand?

2. Industry:

Does he apply himself to the task at hand?

Does he carry on an assigned task without constant supervision?

Will he independently carry a task through to completion if he understands what is to be done?

Does he complete a reasonable amount of work in proportion to his ability?

3. Rate of Work:

Does he maintain the speed level for his grade in all skills?

Does he budget his time well, beginning tasks promptly and continuing at a satisfactory rate?

4. Accuracy:

Is he careful to avoid errors in all work?

Does he check all work to discover errors?

Does he look upon errors as a waste of time, or does he have an "I don't care" attitude?

Does he take pride in his work?

5. Organization:

Is he able to organize his work systematically?

Does his work conform to standards of arrangement, margins, legibility?

Is it neatly done and well written?

Is the paper free from blotches, erasures, fingermarks?

Does he show evidence of organization in his thinking?

6. Participation:

Does he do his part in the solution of a problem, either by the contribution of ideas or by activities?

Does he show an interest in group activity?

Does he derive satisfaction from the achievement of the group of which he is a member?

Does he show a feeling of responsibility for helping in group discussions and activities, or does he just sit back and listen or let others do the work?

7. Comprehension:

Is he able to understand the directions from the teachers the first time, or must he have them repeated several times?

Does he understand what he reads? Can he follow written directions?

Is he able to comprehend a new process, such as carrying in addition?

Is he able to draw conclusions from ideas presented?

8. Retention:

Does he remember what is taught?

Does he remember a new process
from day to day?

Does he remember from day to day and for longer periods of time?

Does he transfer what is learned in one situation to new situations?

9. Expression:

Is he able to express ideas in complete sentences?

Does he use acceptable English, free from errors and objectionable slang?

Does he use a reasonably wide vocabulary? Does he show a tendency to enlarge it?

Does he speak loud enough to be heard, and does he enunciate clearly enough to be understood?

Is his speech free from baby talk or impediment?

Does his written and oral English show a growing ability to express ideas clearly?

10. Independent Thinking:

Does he have original ideas, or does he copy others?

Does he try to interpret the meaning of the things he reads?

Does he have a tendency to disagree with group-thinking?

Is he honest in his point of view? Does he have courage to hold to an individual point of view with the whole group against him?

11. Initiative:

Does he begin work without the teacher's help when he understands what is to be done? Is he a "self starter"?

Does he think of new ideas himself? Is he original?

Does he show self-reliance (confidence) in planning his work and in helping the group in a class activity?

(Continued on next page.)

Explanation Sheet for Parents, Cont.

12. Orderliness:

Does he replace books, tools and materials when he is through using them?

Does he keep his own desk neat and orderly?

Does he assume responsibility for the appearance of the classroom, building, and playground?

Does he show a feeling of pride in a well-kept room?

13. Promptness:

Does he get to school on time every day?

Does he assume the responsibility for getting into his place promptly?

Does he leave the school grounds promptly?

Is he prompt in responding to requests and directions?

Is he free from the habit of loitering?

14. Cooperation:

Does he take his place in a social group?

Does he contribute his share cheerfully in work and play?

Does he show consideration for the rights of others in the classroom, on the playground, and in the building?

Does he show good sportsmanship when he is a follower as well as when he is a leader?

Is he willing to share with others and to take his turn?

Does he try to improve for the sake of the group?

Is he able to put himself in the other fellow's place?

15. Respect for Authority:

Does he show an appreciation for the need and advantages of rules and regulations?

Does he show respect for constituted authority?

Does he give quick and cheerful obedience to a request or command?

Is he careful in the use of public and private property?

Does he observe the same code of obedience when under observation as when unsupervised? 16. Health Habits:

Does he give attention to correct posture in sitting, walking and standing?

Does he have regular toilet habits? Does he maintain regular sleeping hours for his age?

Does he assume responsibility for bodily cleanliness?

Does he exercise such hygienic habits as keeping pencils, pens, fingers and foreign objects out of his mouth and nose?

Does he use a handkerchief when he coughs and sneezes?

Does he give reasonable care to his clothing?

Does he take pride in looking attractive?

Is his emotional and mental health normal?

Is he good humored, free from sulking and pouting?

Does he show self control? Does he cry or complain over trifles? Does he giggle and laugh over trifles?

Does he seem happily adjusted in his school life?

17. Thrift Habits:

Does he exercise care in the use of books, tools and materials?

Does he refrain from marking or mutilating books?

Does he exercise care in the use of his personal materials such as pencils, paper, erasers?

Does he save wisely when he can?

(This would be denied by the possession of candy and gum at school in cases where the money might be spent for some useful purpose.)

18. Reliability:

Has he a sense of honor about telling the truth and keeping a promise?

Is he dependable?

Does he complete a piece of work for which he is responsible?

Does he check his work correctly?

Does he show pride in being trusted?

Does he refrain from copying other pupils' work?

the plan is inaugurated is important. The parents must be school conscious and genuinely interested in the progress of their children.

In a situation such as we have in Aberdeen with only one school out of seven using the graph conference plan, the problem of transfers and permanent records is important. Thus far the graph lines have been interpreted in terms of the letter marks used in the other schools. The same plan has been followed for permanent records. Interpreting a three-area graph card in terms of a five-scale letter plan involves complications. As the plan is extended to other schools in the city the transfer and permanent record problem will be reduced and eventually eliminated.

After the plan had been in effect one year the parents of the community were given an opportunity to express their reaction to the plan by means of a questionnaire letter. Parents were asked to comment frankly and file their letter answers without signatures in an Australian ballot box.

The questionnaire letter follows:

Dear Parents:

The conference method of reporting pupil progress in school has had a half year's trial in the Garfield school. You have met your child's teacher at least once. We would like to have your frank statement concerning the value of these conferences.

Will you kindly answer the following questions and drop this paper in a box that will be placed in the school building? You need not sign your name.

Very truly yours,

Have you obtained the information you desire concerning the school progress of your child?

Do you believe the conferences have led to improvement in your child's school progress?

Has your child profited from the absence of competition which the report card method of A, B, C, D's provided?

What has been the attitude of your child toward the conferences?

Are the conferences taking more of your time than you can conveniently give?

Additional comments and suggestions.

The response was overwhelmingly favorable to continuing the plan.

judgment to adapt herself to unusual conference situations.

The time element for the teacher is a problem. The conference plan entails approximately two weeks of after-school time. Teachers have felt that the superior advantages of the conference plan over the formal report card justifies the time spent.

The type of community in which

Liability for Life and Limb

By M. M. CHAMBERS

HEN a pupil meets death or injury in some accident traceable to the negligence of school officers or employees, what recourse has he or his parent? The present state of American law in this area is aptly epitomized by a judge of an Indiana appellate court, in a recent opinion. "Occasionally," says he, "we find in law a wrong without a remedy, and here is an instance of such a situation. If the people demand a remedy, their recourse is to the legislative body."

The case which called forth this statement was that of a six-year-old child who was injured by a fall from a school playground slide. The slide was alleged to have been somewhat out of plumb and sloping toward one side so as to be in a dangerous condition; but the evidence was far from conclusive, resting mainly on the testimony of a postman who traversed the neighborhood several times daily and who had never mentioned the matter to the school authorities, though he himself had children attending the school. Moreover, it was not definitely proved that the child plaintiff in this case was injured on account of any defective condition of the slide. There was some intimation, largely uncontroverted, that his fall was the result of an attempt to come down one of the supports of the apparatus in an unorthodox manner. He had used the same slide several times previously on the same day without mishap.

Suit Against Officials

The suit was against the individual members of the school board, the superintendent and an athletic supervisor. In the trial court there was a verdict for the plaintiff, and judgment was entered thereon, but reversed by the appellate court and a new trial ordered. The individual defendants,

thought the court, are liable for negligence in such a case only when there is evidence of wilful neglect or other improper motive on their part, and not when the evidence points to nothing worse than a mere mistake regarding the safety of a device. The superintendent had honestly reported that the apparatus was properly installed, and the board members were justified in accepting his report, under the court's interpretation of the law.

District Generally Immune

In the foregoing case the school district was not involved as a party. As has been shown by Weltzin and other writers, in nearly all the American states public school districts are consistently held to be immune from damage suits because they are agencies of the state in the performance of a governmental function.²

This common-law rule may be changed by statute or modified by the courts, and has been to some extent altered in the Pacific Coast states and in New York; but in other parts of the country it remains unchanged with few exceptions. For illustration there is a New Jersey case wherein a ten-year-old pupil at a two-room school died as a result of having been kicked in the stomach by a horse which was on the school grounds and being used to draw a load of firewood by a private vendor from whom the board of education had purchased the fuel.

Suit was brought against the seller of the firewood, the board of education and the two teachers. Judgment of nonsuit was entered, and subsequently affirmed by the higher court.

As to the wood vendor, it appeared that the horse had not previously been known to have any vicious propensities, and consequently there was no negligence in using him with ordinary care, as in the present case. As to the teachers, there was so little support for a charge of negligence that the plaintiff accepted a voluntary nonsuit. As to the board of education, the court stated the familiar theory: "The supplying of fuel with which to heat the school building was a governmental function of the board of education, as an agency of the state, and, that being so, it cannot be called upon to respond in damages in cases of this character."3

Transportation Cases

The same rule regarding the nonliability of the public school district is exemplified in South Dakota, where a school girl was injured while being transported in a school bus. In this case there was some question as to whether the particular transportation involved was within the statutory authority of the school district to transport pupils, or outside its authority. The court did not undertake to settle this question, but disposed of the case by pointing out that if the district was not exceeding its authority, then it was performing a governmental function as an agent of the state, and, in the absence of a statute imposing liability, could not be held liable for negligence. On the other hand if the district was exceeding its authority, then the acts of its officers in so doing were ultra vires, and a school district is not liable for acts of its officers or agents outside the scope of their authority.4

¹Medsker et al. v. Etchison, (Ind. App.), 199 N. E. 429 (1936).

²Weltzin, Frederick: The Legal Authority of the American Public School as Developed by a Study of Liabilities to Damages. Grand Forks, N. D.: Mid-West Book Concern, 1981, p. 286.

³Barnett v. Pulda et al., 116 N. J. Law 141, 182 Atl. 879 (1936).

⁴Schornack v. School Districts Nos. 17-2 of Brown County et al., (S. D.), 266 N. W. 141 (1936).

The likelihood of accidents in school transportation is so general that many boards of education have felt a moral responsibility to provide some means of compensating pupils who may be injured, even though the law exempts the district from responsibility. In several states, local boards have purchased liability insurance policies from insurance companies to protect the district and its employees from damage suits. In some states this procedure has been expressly authorized by statute.

A Tennessee Case

An indication that it may be a factor tending to produce changes in the harsh common-law rule which frequently denies any recourse to injured pupils comes from Tennessee. Here a twelve-year-old girl was injured through the negligence of the bus driver while being transported in a county school bus. Suits were brought by the girl and her father against the bus driver and the county, and judgments for \$3,500 in favor of the girl and \$1,000 in favor of the father were entered against both defendants. This made the county liable for the sum of \$4,500.

Appeal was taken to the supreme court, where the decision was modified as to the liability of the county, and it was held that the county could not be made unconditionally liable for the full amount of the judgments, but only for such amount as it might obtain from the private insurance company to cover such liability. The court indicated that if no settlement were made with the insurance company, then all parties concerned could sue it to determine its liability.

In this case the court made a wide stretch of the legislative language by holding that the statute authorizing county boards of education to require bus drivers to furnish bond to ensure the proper performance of their duties, must be construed to authorize the boards to purchase liability insurance policies to protect themselves and their employees.⁵

⁶Rogers et al. v. Butler, (Tenn.), 92 S. W. (2d) 414 (1986).

In a Los Angeles high school the teacher in charge of the laboratory in auto mechanics set a pupil to work at repairing a radiator at a soldering bench along the wall. There was a safety line on the floor 5 feet from the bench, but no guard or barrier. The teacher set another pupil to work on the motor of a car which was maneuvered into such a position that when the pupil started the motor while the reverse gears were in mesh, the car plunged backward across the safety line and pinned the first pupil against the bench, severely injuring him. The trial court directed a verdict in favor of the high school district and the teacher, absolving them from negligence.

In the appellate court this judgment was reversed and a new trial ordered. The question of negligence must go to the jury, because the evidence indicated that the wheels of the car had not been blocked, as is the custom in some shops and garages; and the court was not satisfied with testimony to the effect that this custom is not followed in many school and industrial shops.

Regarding the latter, it was said: "Youth is notoriously indiscreet, careless and indifferent in the face of dangers, as to which adults are held to a high degree of care. Therefore, those in charge of boys and girls at school and elsewhere are called upon to adopt such means and measures as may be available for their protection. Failure to follow such a course constitutes negligence."

In the Gymnasium

In a school in Albany, N. Y., a fifteen-year-old boy, awkward and ungainly, weighing about 225 pounds, participated in an obstacle relay race as a part of a regular gymnasium class. The race required him to run, perform a forward roll or somersault on a mat in the center of the floor, touch a pole at the opposite end of the room, and return. Upon resuming his feet after executing the forward roll, he fell and sustained an injury

to his leg because the mat slipped on the floor under him. He sought to hold the board of education for negligence because the floor was slippery and the mat was not affixed to it. He was awarded a verdict and judgment in the lower court, but the appellate division reversed the judgment and dismissed the appeal. All exercise and play, thought the court, involves some hazards. The state requires physical training in the schools, and the school board is not an absolute insurer of the safety of the pupils, but can only be held to the exercise of reasonable care. An ordinary mat on an ordinary gymnasium floor does not constitute an extraordinary hazard.7

In Parochial Schools

Another New York decision awarded pecuniary damages to an eleven-year-old pupil in a parochial school who was injured while playing. A passageway leading from the school playground terminated at the top of a retaining-wall 40 inches high, with no fence or other protective guard. While playing tag the pupil ran through this passageway and fell off the wall, sustaining injuries. A judgment in his favor has been unanimously affirmed by the appellate division.8 Of course, it is to be observed that private and parochial schools stand on a different legal footing from public schools and cannot be excused from liability on the ground that they share the state's immunity. However, they often are absolved on various principles, chief among which is the theory that public policy requires funds donated to charitable or educational purposes to be held for those purposes.

The whole question of the tort liability of educational institutions is, like any other branch of the law, open to change. Apparently the tendency is away from the harsh rule which often leaves an innocent injured party without recompense, and toward a more humane development under which educational funds may still be properly safeguarded.

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⁶Perumean et al. v. Wills et al., (Cal. App.), 57 P. (2d) 554 (1986).

⁷Cambareri v. Board of Education of City of Albany, 246 App. Div. 127, 284 N. Y. S. 892 (1936). ⁶Stoges et al. v. Church of the Holy Rosary, (App. Div.), 287 N. Y. S. 236 (1936).



Campus pageant

This Public School Is Public

THE Jordan High School, Salt Lake City, receives its name from the Jordan River, which meanders around more than two sides of the campus. The school enrolls pupils in the seventh grade and in the first two years of the four-year high school course. For the last two years of high school the pupils must go to one of the three senior high schools of the city. There are 670 children attending during the school hours of the day.

On many occasions in the evening groups of progressive citizens gather for various purposes. The group is made up largely of laborers but has a liberal representation of professional men. All come with a purpose and achieve worth while things for the community.

To get a complete picture of these

By L. JOHN NUTTALL, JR.

Community League



activities it is necessary to describe those of one school year.

- 1. In order to cooperate with public officials in improving streets, providing parks, supporting a branch library and promoting general community betterment the Second Precinct Community League has been organized. The executive committee of this organization meets monthly in the school. Three large public meetings were held in the auditorium during the year. The civics classes and the commercial department in the school found real life motives in cooperating with their neighborhood league. League officers came to the school and secured the assistance of teachers and pupils in surveying the district preceding a clean-up campaign, in writing letters to citizens concerned and in sending out notes of appreciation.
- 2. During the summer months the building and grounds are used as a recreation center under the direction of the city recreation department. The campus, the gymnasium, the shops, the sewing room and the music room are used. Under the same supervision during the winter there were present two evenings a week about 300 young people engaged in various recreational activities. In some cases the supervision of this recreational work was done by regular teachers and in some cases by help employed by the city.
- 3. During the last school year the Salt Lake Council of the Boy Scouts of America held three training courses, or institutes, in the building.
- 4. When the Federal Relief Administration began to provide for unemployed teachers by the development of a program of adult education, classes for 200 adults were organized in the Jordan High School.
- 5. The school has an active parentteacher association. Three general evening meetings of this organization were held during the year. In addition to these meetings three late afternoon classes for parents were held each week in which teachers provided by the Salt Lake Civic Center were in charge.

Under the leadership of the Jordan parent-teacher organization three joint conferences of the parents and teachers of the Jordan High School and the contributing elementary schools were held. Members of the Salt Lake City board of education, the city supervisory and administrative staff, representatives from the state department of education, members of the University of Utah faculty, and the minister of the First Unitarian Church participated. The topics included general social and educational problems and questions of local importance in coordinating the work of the schools of a neighborhood.

6. All of the organizations mentioned contributed to the staging and the necessary publicity of a pageant produced by the school children. In this there was represented the history of the West from the time the Indians were the sole residents to the present complex white man's civilization. The stage was the green campus in the bend of the river. Seats were erected

with backs toward the building, for the crowds were there to see the program. Every child in the school took some part. It was essentially a school exercise but every agency in the neighborhood contributed.

7. During the present unhappy depressed economic conditions some former pupils of the school, left wholly despondent by unemployment, have drifted back for study and activity. These have been taken in informally as far as possible and given the inspiration of the school. The cafeteria facilities have been used for serving free lunches by the relief agencies and for relief food-canning projects.

These activities represent the community use of this school. None of them interfered with the regular routine of school work. Without any label or special recognition the school has assumed that one of its duties is to serve the people of the neighborhood, old and young, and in doing this make life happier for the people, whose school it is.

Why Not Try Science?

By ROBERT L. EBEL

Rapids, Iowa, we conducted an experimental course in scientific attitudes, attempting to develop a mental readiness: (1) to become saturated with science; (2) to seek cause, law and unity in natural phenomena; (3) to use the scientific method of arriving at truth; (4) to be critical of one's work and of the work of others, and to receive criticism graciously and usefully, and (5) to be open-minded.

Removal of the alleged conflict between science and religion is the first step in developing mental readiness to become saturated with science. This may be accomplished by pointing out the limitations of science to the field of physical forces of life and the limitations of religion to the field of spiritual forces of life. Positively, we may develop mental readiness for science by presenting interesting sketches of the lives and works of famous scientists.

Superstitious beliefs may be removed by a direct attack which proves their falsity and identifies them with ignorance. Then ideas of cause, law, order and unity can be inductively developed.

A person must know the rudiments of the scientific method before he may be considered to have scientific attitudes. An outline of this method, illustrated abundantly with instances from actual scientific work will lead to an understanding of the scientific method. Practice in the use of it may be obtained in laboratory work.

To develop critical thinking, it is well to teach first some of the brief fundamentals of logic.

When Teachers Give Advice

By VIRGIL M. HARDIN

HE problem of guidance is constantly looming larger and larger on our educational horizon as we gain more intelligent insight into the actual needs, both present and future, of our secondary school population. Guidance, quantitatively and qualitatively, which will on the one hand contribute the maximum to the individual and on the other, to society, is the imperative demand facing us.

W. C. Reavis, in the National Survey of Secondary Education Monograph No. 14, points out these reasons for guidance: (1) the character of the demands for modern secondary education; (2) the changes in the social and economic order to which the secondary school pupil must adjust himself; (3) the needs of the adolescent for counsel and guidance, and (4) the necessity of avoiding waste in the process of education. We shall not discuss the implications of these needs, as this would lead us too far afield.

Six Reasons for Guidanco

Koos and Kefauver, in their book "Guidance in Secondary Schools," discuss these needs for guidance: (1) the increased enrollment in our secondary schools-from 3.8 per cent of total population in 1890 to 46.6 per cent in 1930; (2) decrease in employment; (3) the democratization of our large secondary population; (4) the expanded curriculum and vocational opportunities; (5) the elimination from school; (6) the life career motive. They also give recognition to the need for guidance as related to our social and economic situation.

Another outstanding need is the fact that the public in general, and the critics in particular, are finding fault with the products of the secondary schools. The people have had more or less a blind faith in education and in these days of disillusionment they are changing their attitude and are raising some embarrassing questions. If we of the secondary school are to meet this challenge we must face the issue squarely.

A pertinent question that confronts the principal is, Who is to administer the program of guidance? Reavis, in his national survey of programs of guidance, found that in secondary schools with a population of approximately 200, the principal was the chief functionary. Deans of boys and of girls in large schools played a prominent part. Teachers in small schools where there is absence of a guidance organization were doing work in this field. Trained counselors were active in the highly specialized fields and guidance committees in about one-fifth of the schools with an enrollment of more than 1,000.

But the significant functionary from the standpoint of this paper was the home room adviser in schools with an enrollment above 1,000. This practice was prevalent in about seven-eighths of the schools. Since our financial crisis has played such havoc with our school organizations, it is reasonable to suppose that this number of instances in which teachers are directly involved has increased, rather than remained the same or decreased.

Irrespective of how imperative the need may be for guidance or how excellently planned the organization and program may be, the possibility of realizing the maximum values rests primarily with the home room advisers or teachers; therefore, it is extremely important that these persons be well trained for this specific task of the secondary school.

Teacher-training institutions should help the school meet the need for pupil guidance. Better selection of teachers will be an aid. A program of training for teachers in service possesses possibilities unsurpassed by other means.

On examining the literature pertaining to guidance we find a wealth of theoretical material. We also find excellent suggestions for the mechanistic side of the problem, but there is a meager amount of material dealing with the specific problem of training teachers for the job.

Meyers1 says that the counselor should have a liberal education as represented by a bachelor's degree from a reputable institution. The underlying work should include courses in sociology, economics and psychology, not that these courses of themselves will satisfy the needs of the trainee, but they will provide a background of experience that will give clearer understanding of the problem.

Recommendations of Leaders

It is Lee's2 opinion that the guidance worker's training should rest upon a broad cultural foundation. making him a superior person in the realm of human relations. In the next place, Professor Lee thinks that the guidance worker should have training in the field of sociology, because the guidance worker is a sociologist; in

^{&#}x27;Meyers, George E.: "Training Recom-mended for Counselors." Vocational Guidance Magazine, January, 1928. *Lee, Edwin A.: "The Professionalization of the Guidance Worker," Vocational Guidance Magazine, October, 1925.

the field of economics, because the guidance worker is an economist; in the field of psychology, and in the science and art of education, with particular reference to his part as a guidance worker. In addition to this specific training, he would add specialized training in the theory and practice of vocational counseling.

Proctor, in his book, "Educational and Vocational Guidance," recommends that normal schools (and we think he would include other teachertraining institutions) should offer as a part of the training of every teacher for the guidance function, economics, sociology, educational psychology, educational tests and measurements and statistics. He also recommends for secondary school counselors the A.B. degree, including fifteen semester hours in education, a teaching major of twenty-five hours, courses in educational psychology, statistics, tests and measurements, vocational education, vocational educational guidance, and courses in fields of economics and sociology.

While the recommendations of these leaders are excellent in that they give recognition to the specific need for training for guidance workers, they do not go far enough. Those of us in the field of administration on the secondary level are confronted with a stubborn fact, rather than a beautiful theory; therefore, we must do something about it.

Colleges Must Help

In the first place it would seem reasonable that colleges and universities, which have as one of their special functions the training of teachers for secondary schools, should give intelligent recognition to this problem. Without the help of these institutions, we shall be handicapped seriously. The committee that prepared the national survey of the education of teachers recommends that all institutions educating teachers should develop in both class and extraclass activities the social personalities of prospective teachers and a sensitiveness to the approved amenities of educated people. They further recommend that professional curriculums should be differentiated according to the major types of educational services to be rendered.

These institutions of higher learning can help materially not only by offering the essential courses for guidance but by pointing certain essential courses toward the specific problems of guidance, and by making students realize the significance of these courses in relation to the problem under consideration. When possible, student teachers should have opportunities to work in a guidance laboratory under skilled direction.

Wiser Choice of Teachers

Another step in the right direction is through the selection of teachers. Those who are charged with this responsibility should give much consideration to the training the teacher has had, as well as to the personal qualities that are so essential in relation to the problem of guidance. Too often the administrator gives too much emphasis to the standards set up by the accrediting agencies with respect to the specific requirements for teaching a particular subject, and ignores the fact that the candidate will face pupil personnel problems that are often more exacting than those dealing specifically with the techniques involved in the teaching of a given subject, such as English or mathematics.

A third step in the process is the training of teachers in service. One approach is to insist that teachers who attend summer schools select courses that will give them a clearer vision of the guidance function in its several ramifications. If the school is situated near a training institution, teachers may be encouraged to take advantage of extension courses in fields previously suggested.

One of the most effective ways for meeting the situation is for the principal to set up a training program within his own school. He may plan a series of faculty meetings dealing with such problems as (1) the meaning of guidance, (2) the need for guidance, (3) what constitutes an

adequate program of guidance, (4) the teacher's relation to guidance and (5) what the local school can do in meeting the needs of pupils.

After completing these orientation problems, the principal may select a committee to work out a program of guidance which meets the particular needs of the local school. When this has been done it will be necessary to have the faculty as a whole discuss the recommendations of the committee and suggest modifications that may seem necessary. At the conclusion of this work the program should be put into action when it is considered most advantageous to do so.

Let us not be so optimistic as to insist that this will be wholly adequate, for it is one thing to consider a problem in anticipation of action and quite another to see the problem through. The principal will need to supervise the several guidance activities for the purpose of evaluating the work and for providing remedial help to the functionaries who need his assistance.

Another suggestion for training teachers is to make it possible for them to do research in the fields of guidance by putting at their disposal certain well selected books and magazines that deal specifically with this problem. If funds are not adequate for this, the principal might ask teachers to supplement the available funds with a small contribution and thus secure needed materials.

Demonstration Meetings Helpful

Finally, we suggest that the principal arrange occasionally for demonstration meetings that deal with some vital problem in guidance. Certain teachers are naturally well adapted to this type of work and could, through demonstrations, give valuable assistance to the others.

There are other possibly more effective ways of training teachers in service, but we are not so much concerned with the "how" of the problem as we are that it shall be undertaken in reality. The challenge lies not so much in "Can it be done?" but in "Will it be done?"

Regarding Repeaters

Sad Effect of Failures Upon the Child

By EUGENE S. FARLEY

RADE failure is much like our patent medicines. It is used to cure all ills but seldom cures any. It is supposed to spur the loafer on to greater effort, stimulate interest where interest is lacking, and compensate for lack of scholastic ability. Until twenty-five years ago the effectiveness of retardation was unchallenged. In 1909 Ayres' "Laggards in Our Schools" centered attention upon the problem of pupil failure by revealing the number of pupils from all parts of the country who were retarded in their grade-progress.

Since that time the problem of pupil adjustment has been made more acute by the lengthened period of compulsory attendance. Whereas the maladjusted child could formerly escape from the school at an early age, he is now compelled to remain until he is at least fourteen and generally until sixteen. The lengthened period of schooling increases the harmful effects of maladjustment and makes necessary a program that is adapted to the varied needs of individual children.

To determine the effects of retardation upon child development a series of studies have been made in Newark.

Newark Studies Failures

The first of these studies was intended to reveal the factors that are associated with failure and retardation. As was expected low intelligence and low achievement were closely associated with retardation. The close correlation between intelligence and achievement indicated that lack of scholastic ability was the basic cause of maladjustment even though poor achievement was the immediate cause of retardation. The results indicated that children with low I. Q.'s

faced inevitable failure in schools that adhered to a rigid scholastic program or endeavored to maintain arbitrary grade standards. No relationships between socio-economic status or health and grade-progress were revealed, but it was found that undesirable character traits tended to be associated with retardation. There was no evidence that these undesirable traits were either a cause or a consequence of retardation, but it is probable that they were both. Although undesirable character traits may deter school progress, it is probable that constant maladjustment and failure encourage the development of undesirable personal qualities.*

Truants Usually Retarded

In 1934 the psychologic and school records of 422 children referred to the attendance department for truancy were studied. It was found that these children were, for the most part, lacking in scholastic aptitude and were retarded in their grade placement. The median I. Q. of the group was 82, and only 10 per cent had I. Q.'s above 100. Of the group 93 per cent were retarded in their grade placement, indicating some maladjustment in the school work.

It was noted also that with a number of the pupils the grade retardation was greater than their mental retardation. Thirty-seven per cent of these pupils had mental ages above the average for the grade in which they were placed. These facts indicated that possibly these children were not doing the work of which they were capable. This supposition is partially

*This study is reported in the Elementary School Journal for November, 1983, p. 186. confirmed by a study of the accomplishment ratios of children entering the Binet classes (less than 70 I. Q.). This study showed that the maladjustment of these children in the regular grades was so great that the achievement at time of placement in Binet classes was below their mental age. This is in distinct contrast to dull normal children whose accomplishment ratios are generally above.

The evidence of these studies suggested that retardation was detrimental to scholastic development of the child. To secure more adequate information concerning the effect of retardation upon academic achievement a series of studies was under taken. The first studies were intended to show the effect of retardation for one term upon the achievement of children. Approximately 400 children, in grades two through five of three schools were included in a study completed in 1933 and 184 additional pupils were studied in a similar fashion in 1935.

In January, 1933, the teachers of these grades were requested to list all pupils whose promotion was doubtful. Approximately 400 pupils were listed and all of them were given an intelligence test and the Stanford reading and arithmetic tests. The children in each grade were then paired on the basis of I. Q., mental age and chronological age, and at the end of the term (January, 1933) one pupil from each pair was retarded and one promoted. All pupils were then placed in regular classes and no special consideration was given to them.

By the end of the spring term a number of the pupils had left the

TABLE I-THE EFFECT OF RETARDATION UPON ACHIEVEMENT FOR ONE TERM I. Q. Mental Age Chronological Age No. of Critical Critical Critical Median Mean S. D. Median Mean S. D. Median Mean S. D. Grades Group CasesRatio* Ratio* Ratio 7-11 7-9 14.7 8-9 8-9 Promoted 89 90.5 12.9 1.6 9 8 2 & 3 87 Retarded 83 89 89.3 8.6 8-0 7 - 1010.4 8-10 8-11 10.2 1.3 92.4 14.2 9-2 9-3 10-1 Promoted 69 92 13.6 9 - 1110.9 Retarded 90 90.29-2 9-3 10-2 10-2 56 9.7 10. 12.0 .0 37 79.2 11.2 9-1 12.3 11-9 11.7 5 Promoted 8-11 1.0 11-8 Retarded 33 75 75.8 7.6 8-10 8-11 10.9 11 - 812-0 11.5 1.7 *Critical ratio is the difference between the means of the two groups divided by the probable error of this difference.

schools and only 365 remained. Although the pairings were disrupted by these withdrawals the groups were still comparable and, therefore, all of the remaining pupils were included in the study.

In June these pupils were given an alternate form of the Stanford tests and the gains made by each group between January and June were computed. In grades two and three the promoted group made a greater gain in reading than was made by the retarded group. In all other instances the gains made by the retarded group were slightly greater than were made by the promoted group. However, the gains in grades four and five favored the retarded group by only one point in reading and two points in arithmetic. These small gains hardly justify the expense and discouragement of retardation.

Bi-serial correlations of the gains made by the two groups gave further evidence that retardation was of doubtful value. In grades two, three and five these correlations indicated that retardation of one term had but little effect upon scholastic progress and that this effect probably was not good. In grade four, however, the correlations indicated that retarded pupils made the greater gains in arithmetic. Although these correlations are contradictory they indicate the dubious values of retardation.

The seriousness of the problem of adjustment is shown by the large proportion of the pupils who secured poorer test results at the end of the study than at the beginning. Over one-quarter of the pupils in each grade made no gains in arithmetic,

	TABLE I				E PROMOT		RETARI	DED	
Grade	Group	Q_1	Reading M	Q_3	S. D.	Q_1	Ariti	$rac{hmetic}{Q_3}$	S. D.
2 and 3	Promoted Retarded	1 0	7 4	13 11	9.0 6.2	$-3 \\ -2$	2 3	8 8	10.1
4	Promoted Retarded	2 3	7 8	11 14	7.5 10.0	$-\frac{3}{0}$	$\frac{2}{4}$	7 10	$\frac{7.6}{7.8}$
5	Promoted Retarded	$-\frac{1}{2}$	4 5	11 8	8.8 4.8	$-\frac{2}{0}$	$\frac{2}{4}$	8 10	6.2

RETARDED G	ROUPS DURING (JNE TERM*	
Subject	2 and 3	Grades 4	5
Arithmetic		$^{+.49 \pm .05}_{+.13 \pm .06}$	03 ± .08 01 ± .08

and in four of the groups the children actually retrogressed. It appears that the confusion resulting from constant maladjustment and failure causes some pupils to unlearn subject matter that formerly has been understood. The fact that these losses were common to both the retarded and promoted groups indicates that the learning problems of dull children are not solved by promotional policies.

The ability of the retarded and promoted groups to adapt themselves to the class work was indicated by a study of promotion rates at the end of the experiment. The rate of promotion was greater with the retarded than with the promoted group but a majority of the promoted group were able to gain a second promotion and to continue with their class. In the second and third grades 57 per cent of the pupils who had been promoted in the experiment were again pro-

PROMOTI	PERCENTAGE ED AT THE EN PERIMENT, 19	D OF THE		
	Group			
Grade	Promoted	Retarded		
2 and 3	57	92		
4	72	95		
5	86	90		

moted at the end of the term. In grades four and five 72 and 86 per cent of this group were promoted with their class. Apparently many children have been unnecessarily retarded owing to temporary maladjustments in the classroom.

Although retardation of one term seemed to have but small effect upon the scholastic work of the majority of pupils, it was thought that repeated failure might have a pronounced effect upon this work. Therefore, two additional studies were undertaken to determine the cumulative effects of repeated failure.

TABLE				
MENT	WITH	MEN LED C	Age	PAR-

Grade	Sub- ject	No. of Cases	Partial Correlation
6A	Reading	836	$34 \pm .02$
5B	Reading	749	$14 \pm .03$
5B	Arith.	946	$.00 \pm .03$
5B	Arith.	586	$33 \pm .03$

TABLE VI—PROGRESS THROUGH THE ELEMENTARY GRADES IN RELATION TO HIGH SCHOOL FAILURE

			M	edian
	Group	No. of Cases	I. Q.	No. of Terms in Elem. Sch.
1. 2.	No failures 1 or 2	286	109	16.4
3.	failures 3 or 4	217	97	16.9
0.	failures	93	88	17.2

The first study was made in grades five and six because nearly half of the pupils in these grades had been retarded. Over 40 per cent of the pupils had failed at least once and approximately 17 per cent had failed three or more times. The situation in these grades, therefore, was ideal for a study of retardation.

All of these children had been given intelligence and achievement tests and their chronological ages had been recorded. It was possible, with these data, to determine the relationship between retardation and achievement by calculating the correlations between chronological age and achievement when the mental ages were constant. This technique eliminated the effects of mental ability, and as the rate of progress through the grades is the chief factor determining the age at which pupils reach a given grade, these correlations show the relationship between grade-progress and achievement.

Four separate computations were made, two involving reading and two arithmetic. The results in three cases were negative, indicating that the retarded pupil was not doing school work that was commensurate with his mental ability. In the fourth instance the correlation was zero, showing that in this case there was no apparent re-

lationship between retardation and achievement. The results indicate that retardation cannot be depended upon to stimulate effort and improve achievement. They suggest, to the contrary, that frequent retardation and failure may discourage effort and thus deter progress.

The second study of cumulative failures was made in the high schools. Pupils who had been in the high school for two years were divided into three groups. The first group included those pupils who had not had a single failure in high school; the second included those having one or two failures, and the third included those having three or four failures.

To determine the relation of progress through the elementary school to high school work the median number of terms required to complete the first eight grades was computed for each group. These figures showed that failure in high school was associated with retardation in the elementary school. The group having no failures completed the elementary grades in 16.4 terms, that having one or two failures in 16.9 terms, and the groups with three or four failures in 17.2 terms. As would be expected the group with no failures had the highest I. Q., and the group with the most failures had the lowest I. Q. These results indicate that retardation cannot compensate for lack of scholastic ability, and that retardation does not prepare pupils for high school work.

Repeated failure and retardation defeat their purpose. They do not stimulate effort but on the contrary discourage it. The child, who constantly fails, receives no satisfaction from his work and frequently becomes so discouraged that continued effort seems futile. If confronted with impossible tasks he is likely to become antagonistic. This may be expressed in sulkiness and poor behavior, or in truancy and delinquency.

The consequences of these attempts to escape may seriously aftect the future life of the individual.

Can High School Freshmen Read?

By HOLLAND D. ROBERTS

WITHIN the period of a single year the high schools of the United States have become reading conscious. Before that time the majority of teachers and administrators had assumed that all children who entered high school could read.

Now we know that entering high school freshmen vary in reading ability from third or fourth grade level to superior adult capacity. From 10 to 20 per cent of high school pupils are seriously retarded in reading. Many of them cannot understand the books, magazines and newspapers placed in their hands.

Reading programs are being developed in the leading high schools of the United States to meet the needs of the pupils. In New York City a large scale plan was initiated with emergency relief funds which

provides successful preparation for individual or small groups of four or less. At the high school in Palo Alto, Calif., reading speed of high school freshmen was improved 25 per cent in one semester without loss in comprehension.

Directors of high school reading are recognizing that reading is thinking, and that the defenses against propaganda and problem solving in the interests of the majority of the people, are necessary parts of the reading program and of greater importance than mechanical skills and techniques.

Trends in teaching high school literature are strongly toward individualized free reading under the guidance of able leaders. Extensive reading has taken the place of intensive reading.

Answer to Housing Problem

By GERALD M. WELLER

HE research division of the National Education Association completed in January, 1935, a most important survey of the nation's school building needs. It was revealed that nearly 700,000 pupils were housed in school buildings that had been condemned as unsafe and insanitary; 600,000 were housed in portable, rented or other temporary structures; 400,000 were forced to attend school part time because of inadequate housing facilities, and 2,-300,000 were attending small schools that should have been abandoned in favor of larger consolidated schools.

Furthermore, only 5 per cent of the nation's schools had been constructed since 1930, while 33½ per cent were built between 1870 and 1900, and nearly 8 per cent dated back to the Civil War period.

California Situation Typical

A recent and highly significant study dealing with this problem is a survey of school building adequacy in California. In this comprehensive investigation it was found that for the state as a whole 58,000 pupils, or one-fourth of the children in 98 per cent of the elementary districts of the state, were housed in buildings twenty-five, thirty-five and forty-five vears old. On the financial side it was discovered that out of 2,725 elementary districts, 937 or one-third were unable to finance needed school housing facilities even by bonding to the legal limit. About 39 per cent of the attendance in the total group of districts referred to was found in those same financially weak districts. The cost of an adequate state housing program was estimated at some \$33,-300,000, and this in spite of federal school building aid allotted during the last two years.

Responsibility for this situation, which of course is widespread and not in the least peculiar to California, can be laid directly at the door of the states themselves. Thus far few states have sufficiently awakened to concern themselves with the situation.

It is true that Delaware is one state that since 1927 has been successfully financing all of its local school building construction. Furthermore, Arkansas, Minnesota, Ohio, Rhode Island and Wisconsin have granted meager and limited aid for both urban and rural schools; while Alabama, Missouri, New York, Oklahoma and South Carolina have made similar grants, but for rural schools solely. The rest of the thirty-seven states have assumed no concern with the problem whatsoever.

Inasmuch as many states are guaranteeing children today at least a minimum educational opportunity through state aid, there is no good reason why they should not also guarantee that the instruction be offered in buildings that conform educationally and structurally to certain minimum standards.

Three Courses of Action

The answer to the problem is to be found in three courses of action. One is to consolidate weaker districts, especially with those of more financial ability. A second is for states to institute a program of financial aid for local school building construction. A third is to inaugurate a plan of federal building aid to states.

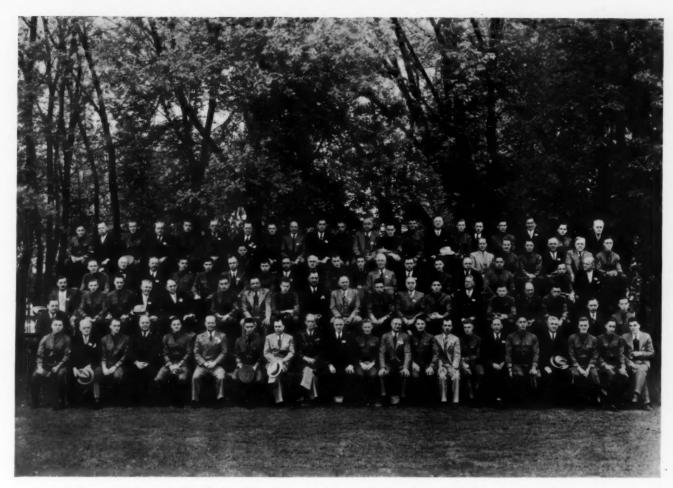
While the development of larger units of administration would be a step in the right direction, it is not in itself a complete answer to the housing problem. Such action may of course reduce the extremes of inequality but it can never result in an entirely satisfactory equalization of the financial load or burden. The only permanent and fundamentally sound solution to the district housing problem is for states to embark upon a program of equalizing the tax load for financing capital outlays in local school districts. This would guarantee in every district within a state minimum schoolhousing facilities.

There are four major principles upon which any such plan of state aid must be based. These grow out of the fact that since education is a state function, the state must assume the responsibility for (1) defining minimum school building standards, (2) setting up a plan involving dual participation by both state and district whereby financial support can be provided to guarantee minimum buildings, (3) equalizing the tax load for financing minimum essential programs, and (4) encouraging districts to exceed the state's own minimum defined building if possible.

Federal Aid Must Change

This is not the place to discuss the detailed procedures necessary to set these principles into operation. Suffice it to say that any technique for the equalization of the capital outlays of a state's public school system would involve such elements as the definition of a minimum unit of school housing need, the development of a measure of housing need, the determination of a standard cost per unit of need, the determination of the relative ability of districts to finance their needs, the development of measures of uniform effort to be required of all districts participating in the equalization plan and certain others.

Inequalities in wealth among states also make it essential that a permanent and sound plan of federal aid be instituted. Vital as the present federal aid has been during the period of the emergency in education, the basis of its distribution has certain defects that a permanent policy should eliminate. Federal aid, like state aid, must recognize the factors of ability, effort and need—factors that now are entirely ignored.



Fathers and sons sit for their picture at a spring reception given at Culver Military Academy.

School Life With Father

By EARLE HITCH

N THE time of Wackford Squeers there were few relationships between the school and the parents of its pupils. The instruction of children was something reserved for the pedagogue, and parents neither expected nor were given much voice in the business.

The shift from this attitude was gradual, but it was positive. In the United States it has, as we should expect, been most pronounced in the public schools, and has been principally expressed in the associations of

parents and teachers, which had their beginnings at the end of the last century.

By 1920 these associations had begun to make themselves unmistakably felt as influences in the management of school affairs. Whether the tax rate for school purposes is niggardly or adequate, whether student health and comfort are given much or little consideration, whether terms are long or short, and whether teacher salaries are miserly or sufficient, have now become matters on which the asso-

ciations have a powerful effect in thousands of communities. More than one and a half million persons were reported enrolled in these associations in 1931 by the Hoover committee for the study of social trends.

In contrast to this, there is relatively little organized parental effort in behalf of the private schools in this country. The private schools have traditionally made their bids for support to their alumni. Few of them have anything comparable to the parents and teachers' associations of the public schools. There are a few conspicuous examples to the contrary

(and where they are found they appear to be superior in effectiveness to the average parent-teacher associations), but on the whole the private schools have been hesitant to seek an organized relationship between themselves and their patrons.

Some of the private schools prefer to be cloistered from extramural influences; and many of their patrons may prefer to have them so. Such an attitude is important to certain of the socially exclusive schools, and some of the schools that are pedagogically exclusive adopt it also. But this attitude is limited to a small group. Most of the private schools do not subscribe to such a policy. They not only invite, but encourage parental interest in their affairs. But the point is, this interest is most often expressed individually and occasionally, instead of through regular, associated effort.

Inquiry Is Started

Such mutual relationships as have been organized among private schools and their patrons are carried on in a diversity of ways. Few of them have well-defined aims and few have a well-defined direction.

An inquiry completed a few weeks ago among eighty representative private schools show d that thirty-eight of sixty-three reporting had no organized parental relationships. Eleven had parents' organizations. Fourteen reported what might be called substitutes for organized relationships, such as annual receptions for parents, field days, football games, school plays, teas, special week-ends and other forms of entertainment intended particularly to bring the parents into association with the school and its affairs.

The inquiry was circulated chiefly among boys' schools, but it also included a sampling of girls' schools and coeducational schools. Reports were sought from town and country schools, New England schools, Southern schools, desert schools, California schools and Middle Western schools.

What Results Show

The results were as follows: schools approached, 80; schools reporting, 63; schools not reporting, 17; schools having organized relationships with parents, 11; schools having some form of substitute activities, 14, and schools having no form of cooperative parental relationships, 38.

Of the eleven organized relationships, six are associations of fathers. Five are parents' associations, including both mothers and fathers. Kent School in Kent, Conn., has both a fathers' association and a mothers' association. The other fathers' associations are at Choate School at Wallingford, Conn.; Peddie School at

Hightstown, N. J.; Lawrenceville School at Lawrenceville, N. J., and Culver Military Academy at Culver, Ind. In this class is also included the Fathers' Group of Lincoln School in New York. The group is a part of the parent-teacher association of that school, but it maintains a certain independent, masculine existence.

The parents' associations, including in their memberships both fathers and mothers, are found at Manlius School in Manlius, N. Y.; Washington Seminary in Washington, Pa.; North Shore Country Day School in Winnetka, Ill.; Shady Side Academy in Pittsburgh, Pa., and Tudor Hall School for Girls in Indianapolis.

The Fathers' Association of Kent School appears to be the oldest such association among the private schools. It was organized by Father F. H. Sill, Kent's headmaster, about twenty years ago and has given the school a steady support ever since. At Lawrenceville School there is another established association of fathers. It was formed in 1920 by Dr. Mather A. Abbott, then headmaster there.

The Lawrenceville fathers have a membership of 543, counting only those who have paid dues. They meet at the school on a selected week-end in the fall. They lodge in the dormitories with their sons, attend classes with them, dine with them and accompany them to the football game that is arranged for the occasion. Substantially the same program is followed at Culver Military Academy.

These experiences, particularly if repeated each year the boy is in school, give a father an understanding both of the pupil's and the school's problems that he could acquire in no other way, and make him more eligible to give sensible and sympathetic counsel to both sides.

Assistance is also expressed in other ways. Lawrenceville has a class-room and office building that were erected by fathers, and it has received from them other gifts of less consequence. Each year Lawrence-ville's fathers have a dinner in New York at which boys and masters meet informally. The Peddie fathers have



Lawrenceville School fathers spend a week-end at the school each fall. They contributed funds for a classroom and office building.

created two scholarships for able pupils, and the Culver association is accumulating an endowment fund from membership dues and cash gifts for the purpose of providing scholarship aid.

Expressions of private school heads who have had experience with organized parental relationships are unanimously favorable to such enterprises. In the course of the inquiry mentioned, only two skeptical expressions were recorded. Neither came from a school that has a parents' association connected with it.

"Since I have had no experience with such associations, I doubt if I am qualified to express an opinion. However, I will say that I am perfectly satisfied not to have one!" said one headmaster. Another, perhaps meaning to be facetious, said, "There are moments when I feel that the best place for fathers is in the office downtown and not in the close vicinity of their sons."

Remarks such as "We regard such associations as distinctly valuable," are more representative of the general attitude.

"We find that these associations have done a lot for the school in giving the fathers an opportunity to see just what the life of the school is from the inside," said Father Sill of Kent. "Also it gives them a wonderful opportunity to roam around with their sons and talk to them right on the spot."

Dr. Allan V. Heely, headmaster of Lawrenceville, believes the annual fathers' week-end at his school is "a successful and valuable adjunct to the administration of the school," and regards "the organization of great importance and wide potential value."

General L. R. Gignilliat, superintendent of Culver, says: "Now that Culver is no longer privately owned, but is in a trust foundation, we feel that not only the alumni but parents who have sent their boys to Culver are, in a sense, stockholders in the enterprise. The Culver association seeks to give the fathers a clearer understanding of the academy's edu-

cational aims and methods through group conferences at the academy. It is also enabling the fathers to become better acquainted with one another through their meetings at Culver and in some of the larger cities. The interest of the fathers in the growth of Culver and their desire to keep under the guidance of the directors of the Culver Educational Foundation have been most gratifying. A membership of more than 500 is anticipated by next June, which marks the first year of the association."

From the Tudor Hall School for Girls comes this comment by its principal, I. Hilda Stewart: "Our parents' association has been a great help in promoting a more cordial feeling between the school and the home, in creating an intelligent understanding of our mutual problems, in helping teachers to understand weaknesses

and strengths in pupils, and in giving parents an opportunity to see the work that is being done at Tudor Hall."

Leslie Leland, principal of the Maumee Valley Country Day School near Toledo, Ohio, is enthusiastic about any movement that "keeps parents in close touch with the aims and practices of the school." "I seek," she says, "every means I can to get the parents out to the school."

The Rev. George St. John of Choate School feels that the whole relationship of father and school and pupil is constant and intimate. From him comes this observation: "We often say to the fathers and mothers that we want them to feel that they and the school and the boys form a kind of three-cornered partnership, all working together for the boys' good."

Math Teaching Goes Modern

By EARL MURRAY

TRENDS in the teaching of high school mathematics are following two changes in the philosophy of education, namely, that our education is the sum total of our experiences, and that this is a changing world.

The study of the mathematics is being differentiated into two typescertain mathematical concepts for all, and technical mathematics for the specialist. It is argued that there are specific concepts of quantitative thinking, consumer mathematics, social statistics, processes, methods and types of reasoning that must become a part of the education of every pupil of the secondary level. If our curriculum is to be reorganized on the basis of a core curriculum centered around the social approach, then it is up to us to see that the socializing contributions of the mathematics are not omitted from the life of the child.

The mathematics for the specialist is being vitalized in a number of ways. The unit activity project is being used by mathematics teachers in the high school at Santa Barbara. Calif.

A unit on similarity of triangles was worked out in detail and used to develop individual initiative, alleviate the boredom of drill and formal teaching, and allow the pupil to follow his particular interests, instead of requiring a set assignment for each day's preparation.

Another unit concerned the importance of the fundamental assumption in the thought process and methods of logical reasoning. It was emphasized that, regardless of correct methods of reasoning, a conclusion can be no more accurate than the assumption upon which it is founded. Both assumptions and conclusions must be checked by experience for their final acceptance. A third unit was worked out in algebra on games of chance and on finance.

Happy to Say

By WILLIAM McANDREW

THE next batch of bouquets goes to the people of Texas to lay on the political coffin of Congressman Blanton who tied the crape on the freedom of the teachers of Washington, D. C. The Texans have buried Blanton.

A DECENT man may properly, before he goes to sleep at night, forgive himself for his unworthy deeds of the day. Such regret as he ought to feel for not making a perfect score should be felt deeply enough but be corked, sealed and put away with a resolve to have a better tomorrow. Regret or remorse, left lying loose in the mind, ferments and festers. Go to sleep with a clean mind and heart. It will be useful when the next day comes.

HAIL the rising time. Jump out of bed at a bound. Salute the morn and rejoice that you are still alive and in a world in which the worth while things are not all finished.

EVERY golden sunrise begins a day that is going to be better, worse or just the same for you as other days, all depending on you. Alexander, Caesar or Napoleon couldn't do any more with a day than you can. You'll master it or it will master you.

THE men whom we admire for achievement are those who select work suited to the best of their abilities. Although it is a logical project to clear up all the routine tasks and have an uncluttered mind before we call upon our higher powers, the trouble with this scheme is it doesn't clear away the supplementary demands. It leads to so much puttering that there is no time or vigor left for the work suitable for our best effort. The only satisfactory thing to do is to swear on a stack of foolish correspondence, requests and left-over stuff: "I promise on my honor that every day, before my mind has petered out, I will do not less than sixty (count 'em, 60) minutes of the highest grade work I know."

THIS is the time to begin discussing with teachers the kind of closing exercises your schools will put across at the end of the year. What are the public schools for in terms of benefit to the entire community which pays for them? How can we show those who are paying our wages that we are a real civic service?

HALF the energy devoted by pugnacious parents to getting rid of a teacher they don't like would probably make her into a pretty good sort if they devoted it to helping her. If a teacher goes on loving her children, she has to have a supply of affection coming to her. If a man principal furnishes it, there's a danger of the devil to pay. To keep the teacher's heart from running dry is one of the important services a parent-teacher association ought to render. The one to keep telling the public this is the superintendent of schools. Buildings and books are less important than this vital supply of sympathetic regard which is needed to keep teaching alive.

RE the schools free? Are they instruments for orderly social change? I think not. Are they free to discuss current political and social questions of a controversial nature? No.

The schools are supported by public taxation and generally those who pay the bills do not want the schools to be used to effect change. They are satisfied with things as they are. I do not want to see the schools used to perpetuate any particular aspect of the existing system regardless of its merit any more than I want to see them used as instruments to indoctrinate learners with the radical proposals of some new system.

That is not the function of the schools. The schools should be free and open for the discussion of all sorts of controversial questions without bias, and to discuss movements that are taking place in society today. Children should not be indoctrinated in the schools to believe that the social order should necessarily be changed or to believe in continuing the present social order, but they should be trained to search out the facts about controversial matters and upon that basis to make up their minds what is the best decision for them to make.

Teachers are becoming more socially minded today and are trying to discuss social things in the schools, but they are continually hemmed in by those in power to the point where they cannot even think for themselves. It is impossible for the teachers to discuss the truth about government. It is impossible for them to discuss communism, fascism and other "isms" in our society today without being charged with teaching these things.

What we need in this country is a system of education that will enable us to teach the live questions of today without bias and teach the children to act upon the basis of truth in regard to them. When this day arrives, we can really consider that our schools are emancipated and that they are instruments for orderly social change.—Frank G. Pickell.



THE SCHOOL PLANT

Cut to Elementary Measure

By CHARLES A. PHILHOWER

ESTFIELD, an attractive suburban town in New Jersey, nineteen miles outside of New York City, began to be faced with increasing public school demands even during the depression. In consequence, an application was made for a PWA grant of \$275,000. This was passed and work was begun

fees, \$15,312.08; clerk of works, \$4,577.02. There were other small expenses, such as insurance, telephone and attorney, and the grading cost \$17,013.69.

The total expenditure for building and equipment thus amounted to \$247,849.76 with a cost of 31.7 cents per cubic foot exclusive of architect's veloped on the basis of the Georgian colonial style with the idea that it should harmonize with the types of architecture in its section of the town. Consideration was also given to the bearing of the building in the terrain of the region and to the policy of departure from institutional types. It is beautifully situated on a five-acre





Rest hour in the kindergarten. This unit is entirely separate. In addition to other equipment, each child has a folding rest cot with blanket. Grades one, two and three have separate movable chairs and desks, round library tables and chairs. A specially constructed steel storage cabinet for art supplies and materials is covered with linoleum and can be used as a display table.

on the Woodrow Wilson School in the spring of 1934. The building was completed in the summer of 1935 for occupancy in September of that year.

The contract was let in five sections. The actual costs were: electrical, \$10,549.50; plumbing, \$12,406.11; heating and ventilation, \$25,116.00; steel structure, \$10,779.50, and general contract, \$144,769.09. The furniture and equipment cost \$20,925.37; architect's

fee, grading and the equipment. The building alone cost \$203,620.20.

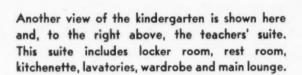
In the main, the work progressed satisfactorily and the building was completed for use at the time originally planned. One part of the organization that facilitated matters greatly was the appointment by the Westfield board of education of a clerk of works who was associated with the PWA superintendent in charge.

The plans of the building were de-

plot. About three acres are available for playground space and at its rear is a cement covered area, 40 by 160 feet, shaded to prevent glare and eyestrain and used for playground space when the ground is wet or covered with snow. The site was purchased at an expenditure of \$18,000. To this was added \$17,013.69 for clearing site, drainage, grading and sidewalks

The building itself is a two-story, thirteen-classroom unit built of brick.





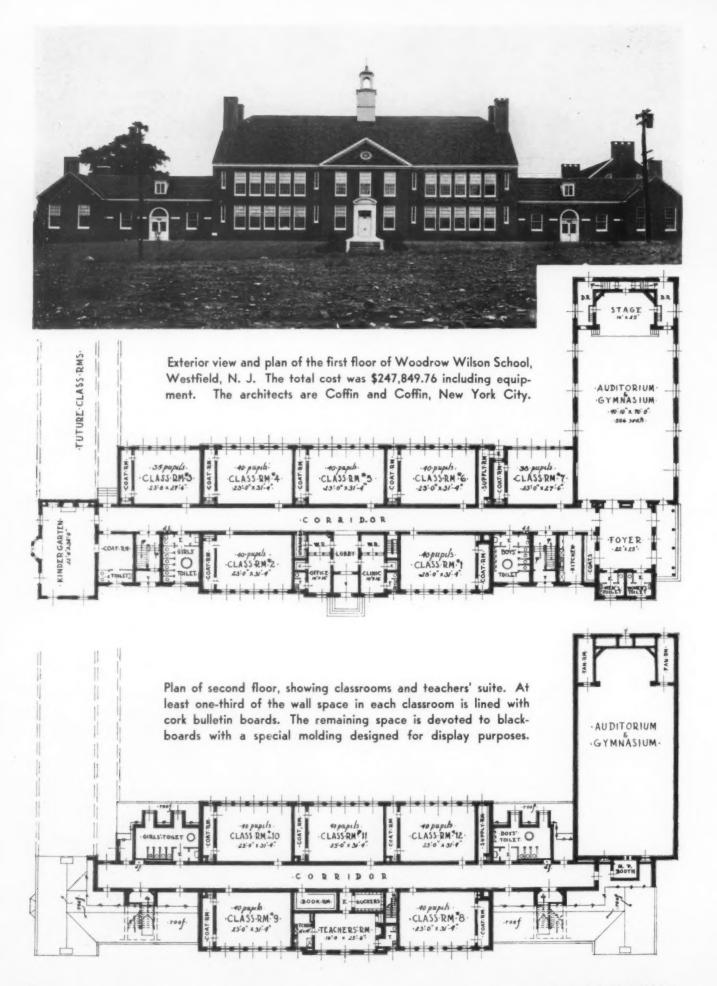
afford ventilation without draft. At least one-third of the wall space has cork bulletin boards with the rest devoted to blackboards having special

The kindergarten suite is a separate unit. It is made up of locker room, cubicle for each child, adequate closet space, lavatory and large room exposed to the morning sun. The equipment includes two complete sets of large building construction blocks, a tower gymnasium, piano, tables, chairs, easels, rugs, sand table, art

The roof is covered with gypsum blocks and with terra cotta shingles, which closely resemble wooden shingles. It comprises a combination auditorium-gymnasium, principal's office, clinic, picture booth, storerooms, book rooms, teachers' suite, lavatories and parent-teacher association kitchen, with a colonnade entrance to the auditorium. The auditorium has a foyer, check room and lavatories separate from the rest of the building for public functions.

Each classroom has within it a cloakroom containing steel lockers and a built-in storage cabinet. Linoleum covers the floors, and windows





and building materials and a large variety of games and toys. Each child has a folding rest cot with a blanket.

Rooms accommodating grades one, two and three are equipped with separate movable chairs and desks, round library table and chairs, movable library shelves and easels. Each room has an especially constructed exhibit table to match the furniture. In it there is also an especially built steel cabinet large enough adequately to store large art supplies and materials. The top of this cabinet is finished with linoleum similar to that on the floor. The surface, which is 22 by 72 inches, is used as an additional exhibit or display table.

Grades four, five and six are equipped with single unit movable desks. Each room has an exhibit table to match the furniture, round library table and chairs, movable library shelves, and a steel storage cabinet similar to those in the lower grades.

Classrooms are not only equipped with the necessary number of basal textbooks but have an ample supply of reference books, library books and sets of encyclopedias. Each room has a utility map case containing a variety of maps suitable to that grade. Globes, aquariums, window boxes and the necessary supplies are provided.

One room on the second floor is set aside as a Special Purposes Room. It is equipped with pupils' desks, piano, radio, stereopticon projector, portable screen, 16-mm. motion picture projector, easels and work benches. All classes use this room.

The auditorium has movable seats and a baby grand piano. For the stage there is a beautiful curtain with adjustable drops and floor screens and also a perforated rubberized motion picture screen for use with the 16-mm. sound-on-film projector and radio. The auditorium booth is also equipped with a 35-mm. silent motion picture projector.

A teachers' suite, made up of locker room, rest room, kitchenette, lavatory, wardrobe and lounge, is equipped and decorated in colonial style.



One of the classrooms showing seating and blackboard installations.

Hall floors about the building are surfaced with terrazzo, and walls to a height of $4\frac{1}{2}$ feet are lined with terra cotta veneer tile. The floor of the combination auditorium-gymnasium is finished with block-on-end over 10 per cent of solid waterproofed cement plus 1-inch air space. The basement

throughout is of concrete construction.

The school has been used for one year and has proved more than satisfactory. The board is pleased with the undertaking and the public is proud of the building, its appointments and the service it is rendering the community.

Tree Care in Cold Weather

PRUNING and transplanting trees are winter pursuits, but the school janitor or gardener must handle both tasks cautiously.

Many kinds of deciduous trees and shrubs are properly pruned in the winter season, especially if neglect and other factors have made drastic cutting necessary.

A regular pruning saw is a handy bit of equipment for the school to own, for the work can then be done much more speedily than with a cross-cut saw. However, the cross-cut saw will serve for large branches.

For branches a half inch or so in diameter, the ideal equipment is a pair of long handled tree clippers. These are also fine for the heavy cuts on shrubs. Pruning shears are all that is needed for the little branches.

Most gardeners consider the winter an excellent time of year to transplant large deciduous trees or shrubs. The only precaution is that the roots must not freeze and thaw.

Evergreens may also be transplanted in winter, but it is necessary to take up a very large root ball with the tree or shrubs.

Many evergreens, nurserymen say, are injured more by winter sun than by cold weather. Both the cone bearers and the broad-leaved types, such as rhododendrons, laurel, boxwood and yew, should be protected from the sun as well as from the cold wind.

English ivy, it is said, will do better on the west side of the schoolhouse than on the south, when used as a year vine, for it can be burned by the winter sun.



Movies on the Move

By WILLIAM E. MORSE, JR.

UR school districts in Oneida County, Idaho, contributed a given amount toward the year's visual educational program. We purchased our equipment and entered into contracts for films with which we make scheduled showings to the various rural schools in the county. A special generator is used to supply

the electricity when electrical power is not available. It develops 110-volt current and provides a 1,000-watt light.

Two extra braces are used to reenforce the carrier and it is not taken off while running. It operates on springs, which absorb the vibration. The machine is air cooled, is simple



to operate and has proved highly satisfactory and very practical.

From our visual education program has grown a wide interest in the development of music, especially part singing, dancing and other activities, for the reason that we have the children prepare programs to provide continuous entertainment while changing or rewinding films. We exchange these programs among schools and select the best numbers for radio broadcast. We make showings both day and night and in some sections alternate the districts in which the showings are made so that a longer program may be secured without setting up the equipment so many times.

We always bring along with our educational films some entertainment films with a little comedy. The older pupils and parents like showings at night and we have large enthusiastic audiences. Old and young alike enjoy these programs. Parents learn a great deal and, through objective tests, we find the pupils really get the information presented in the pictures and retain it remarkably well.

When school is in session we never see a pupil without his asking when we are coming with another picture show. The children are enthusiastic about preparing numbers for our programs and will gladly tackle any part assigned to them. The trips to broadcast over the radio, with side trips, swims and the like, are furnished free of charge to the pupils participating. These trips have given them, so they say, the best time they ever had in their lives.

When school starts each fall we furnish all teachers in the county schools with a yearbook, bound in a special durable cover, in which we list suggestive programs, texts needed for each grade, outlines on the various subjects on specific units of work, the visiting schedule, teacher rating cards, lists of reading circle books, film ratings, teachers' monthly and term reports and trustees' statistical reports. From time to time bulletins are sent out containing added material for the yearbook. In these bulletins we give ratings of the newer films.

Right and Wrong of Radio

By R. R. LOWDERMILK

T IS a proud moment in the history of any school when the new radio equipment has been installed and the parents are invited to participate in the ceremony officially inaugurating its use. There is a hush - a moment's wait - and then, clear, deep and resonant, comes music. The principal's voice fades in with the introductory address. The parents settle back with sighs of relief and contentment. It works! Everybody is satisfied. The reporter from the local paper scribbles busily at notes to be expanded into a story of the farseeing vision of the school principal!

A very pretty picture indeed! Yet, unless the equipment has been selected and planned to fit definitely into the educational program of the school, we may visit this same school later and find the radio equipment little used, the community criticizing the "useless expenditure of money," and the principal ready to throw anybody out the door who mentions education by radio.

School A Spends Lavishly

In School A, the superintendent is particularly sensitive on the subject of radio education. His high school has a high quality centralized radio - the "best on the market," he was assured by the company making the installation. Though there are only twenty-two rooms in the building, the cost of the installation was more than \$3,000. This, to the superintendent, who knew little about costs of such equipment, seemed a reasonable figure, and he made what he thought was the best possible choice. Education by radio, he reasoned, was bound to become increasingly important, and any modern school should be equipped to make the fullest use of it. Though it cut rather heavily into his school budget the cost, he

felt, was amply justified. Other school needs could be taken care of the following year.

Unfortunately, an "economy ticket" carried at the next city election, and pressure groups succeeded in reducing the school levy. Moreover, the superintendent has discovered that school radio equipment, equally serviceable, could have been bought for about half what was paid.

School B Gets Cheap Job

Now, though the state accrediting board insists on additional library facilities, the superintendent feels it unwise to bring this need to the attention of his board, as it might precipitate an investigation into the cost of the school radio. So he carefully avoids anything that would tend to call attention to the radio equipment, hoping that the community will soon forget the whole matter.

A different situation, but one no less delicate, is faced by School B. The principal, a school man with a decidedly forward-looking point of view, became convinced several years ago that radio had much to offer in education, and was able to convince his parent-teacher organization and his board of education that a centralized radio system was needed. After comparing prices, which seemed prohibitive, and consulting local contractors, he was about to abandon the project when he learned through somebody's brother-in-law that a local "Jack-of-all-trades" would equip the fourteen-room school with radio for \$200. Although the actual cost was about \$40 more than this, the community was pleased and commended the principal on his shrewd-

A year had hardly passed before

the radio equipment began to fail at crucial moments — just when the pupils were assembled to hear the President speak, or when the weekly Mothers' Club was waiting to hear the national parent-teacher broadcast! Meanwhile, the man who had made the installation had moved away to run a filling station in an adjoining state.

A radio engineer whom the principal called discovered that the set was a conglomeration of obsolete equipment and home-made parts and advised that it would be cheaper to replace it entirely with new standard equipment than to try to repair it!

This principal hesitates to ask his community to put more money into school radio equipment at this time. Obviously he does not feel it wise to admit that he "made a bad bargain."

School C Fares Better

The principal in School C is no less certain that "school radio equipment is just a waste of time and money." In this case, not only was the radio unit reasonably priced but it was ruggedly built, and over a two-year period the only service costs have been for tube replacements. The installation was made by a thoroughly reliable company which, though it had only recently gone into the field of educational radio equipment, had for some time specialized in commercial sound-distributing systems. Moreover, \$500 for a single-channel system with a microphone for announcements, with speakers in each of the twelve classrooms and the gymnasium, and with a weatherproof horn for the playground, allowed a sufficient profit for any needed servicing.

However, the principal did not foresee that school radio equipment might come to have any other functions than the distribution of radio broadcasts and occasional announcements from his office to the various classrooms of his building. Now he finds schools using their centralized radio systems for a number of other purposes, such as radio assembly programs and classes in radio dramatics.

Buying for the Future

Moreover, the school head learns that recent developments have opened up still greater possibilities. Being actively interested in developing a pupil-experience type curriculum, this principal would like to utilize the radio system in the whole program. Unfortunately, he finds his equipment is so designed that such changes and additions cannot be made without practically scrapping the greater part of his original equipment. With the installation barely two years old, he feels that he cannot yet attempt such drastic changes without deliberately inviting criticism. Consequently, the school receives some five or six broadcasts a week, with the equipment standing idle the greater part of the time. Naturally, the principal is disappointed and has decided that "school radio equipment is something that the average school administrator has no business bothering with."

While these three examples by no means exhaust the list of difficulties encountered by schools, they may be taken as representative of the major problems. In each case, the principal lacked standards for selecting radio equipment to meet the requirements of his school. There can be little question of the need for a set of generalizations to guide the administrator in the task of outfitting the school for sound. Nine standards are presented which should be considered in such situations and which will go far toward avoiding the awkward situations in which the principals cited found themselves. This list makes no claim to completeness, nor is it expected to be applicable as a whole to every school situation. It is intended, rather, to suggest to the local

school a method of approach in solving its own problems.

First, the type of radio equipment selected should be determined by the educational philosophy of the school. In School C, the difficulty was due chiefly to failure to define the functions of radio in relation to those of the school as a whole. If the primary function of school radio equipment is conceived as giving information, it follows that either individual classroom receiving sets or a centralized system designed solely to pick up two or more programs on the air simultaneously and distribute them to classrooms will be sufficient. Likewise, if all classroom work is to be closely supervised by the principal or supervisor, a centralized system of this kind will facilitate the greatest amount of direction.

Setting Up Some Standards

In other cases it may be found that the purposes of the school may best be served by permitting each teacher to use her own initiative in the selection of radio programs and their use in instruction. In this case, if radio is thought of principally as a device for supplementing text materials, individual classroom radios may be found adequate.

On the other hand, when the curriculum is organized to provide for the maximum of student participation in learning activities, a centrally controlled, multiple-channel system, equipped for recording and phonograph record reproduction and having a number of microphone outlets distributed about the building, would probably be most desirable. While this permits "plugging in" of microphones for pupil broadcasting and radio dramatics, it is not to be confused with the school radio units on the market which are equipped with the "classroom talk-back" feature. The latter type has either a permanent microphone in each classroom, or an arrangement for reversing the loud-speaker action so that the sounds of the classroom may be picked up and amplified over a loudspeaker in the office.

This frequently puts undue strain upon the teachers and results in stereotyped classroom work. Teachers are, after all, human beings, dislike espionage and hesitate to have their work judged on the basis of hearing alone. If, however, the radio system is so designed that a microphone may be readily set up in any room for special reports, programs or pupil drama, it can be used to facilitate materially the activity work of the school. From this a second standard may be stated: that school radio equipment should be sufficiently versatile to permit the widest possible

A third standard to be considered is that the investment in school radio equipment should be in proportion to other school costs. This point was clearly demonstrated in the case of School C. Whatever the function of radio in the school, it must be regarded as accessory equipment, and obviously no administrator can afford to invest so much in it that curtailment of more important activities is made necessary. Even though the administrator desires such a centralized system as that just described, its cost could hardly be justified if the expenditure would necessitate doing without other necessary equipment, employing inadequately prepared teachers or shortening the school

Deal Only With Good Concerns

Generalizing from the experience of School B, a fourth standard may be stated. School radio equipment should be purchased from a responsible company that is interested in satisfying its customers as well as in selling equipment. A company which has a reputation at stake—a reputation based on fair dealing and customer satisfaction—and which expects to continue in business cannot afford to put out unreliable equipment or to neglect its service.

As to the matter of cost, a fifth standard is presented: that school radio equipment should be reasonably priced. Part of the burden in this respect rests with manufacturers and

distributors who are looking to the educational field as an outlet for their products. While much of the equipment on the market at the present time is definitely overpriced, it must be remembered that equipment must be so priced as to allow enough profit to enable the concern to maintain the service. Here, again, dealing with a reputable company offers some protection against being overcharged, but the school administrator should compare prices of competitive equipment and make certain that he is not paying for features that he will seldom, if ever, use.

A sixth standard is indicated in the assumption that radio equipment for schools needs to be used as widely as possible in order to justify its cost. Controls should be simplified so that the average teacher with a minimum of explanation can operate the equipment easily. Likewise a seventh standard, that school radio equipment must be so constructed that it will operate with a minimum of servicing should be taken into account. The equipment must be as nearly foolproof as possible, and it must not fail at the precise moment that it is most needed by the school.

One factor in the experiences in both School B and School C points definitely to an eighth standard which, though relatively unimportant where individual classroom sets are used, is a matter of major importance if the school is to be equipped with a centrally controlled system.

In developing equipment for sound amplification and distribution the radio industry has more or less fixed upon certain standardized principles of design.

Without going into the purely technical details of impedance-matching, voltage amplifiers, power amplifiers and the like, it can be briefly pointed out that, unless school radio equipment is of standard design, it may be found extremely difficult or even impossible later to replace one section without rebuilding the entire unit, or to add auxiliary equipment to take care of expanding school functions to which radio may be

found adaptable. Further, when it is desired to transmit programs originating in the school over telephone lines to a local broadcasting station, the school may experience some difficulty if the school radio equipment is not also licensed as well as standard in design. While this practice is only recently coming into use in schools, it is one more factor that the school administrator might take into account.

A final point, implied in the whole problem of fitting radio into the instructional program of the school, is that school radio equipment should be readily adaptable to individual classroom needs. If radio is to be

Three wise men were not so wise when it came to buying school radio equipment. As a result of their bad bargains, education by radio is to them "just one big headache." Mr. Lowdermilk here sets up some standards for selecting radio equipment for use in schools.

used only for bringing programs on the air to the individual classrooms, this standard is met by having a receiving set installed in each room, with each teacher free to use it whenever and however he may desire. If, on the other hand, a centralized radio unit is to be used in a program of broader pupil activities, the problem becomes more complicated.

Only a few years ago, when centralized radio equipment was used, a single-channel system was considered adequate. Now that interest in the use of radio in education has become general, program offerings are being improved. Many agencies are putting programs on the air for use in schools, and multiple-channel systems, capable of picking up several

programs simultaneously, are required. This permits classrooms with varying needs to receive different programs at the same time. Moreover, television has reached a stage at which it may be expected to become practicable within the next few years, and it is probable that schools will want to anticipate this by getting equipment that may readily be adapted to this use.

The question, then, is how many channels should be provided in a centralized radio system? Each additional channel adds to the cost of the installation and makes the equipment increasingly unwieldy in its operation, but it multiplies its usefulness.

One suggestion that might be considered is that a centralized radio system designed for educational use might well provide three amplifier channels, but use separate, portable, all-wave receiving sets. These might either be quickly connected with any or all of the three channels by merely "plugging in," or used in separate classrooms as needed, while the central amplifier system is being used in student activity work.

A number of other standards bearing on specific technical details might well be stated, but it is assumed that school administrators with sufficient technical knowledge in the field of radio to be interested in such details will probably already have a definite notion as to the type of equipment they need.

As a final word of caution, however, it is urged that the administrator considering school radio equipment familiarize himself to some extent with the limitations and possibilities of radio equipment available on the market. A number of reputable manufacturers maintain free technical consulting service and will be glad to answer questions.

Schools have scarcely begun to take full advantage of the possibilities opened up through discoveries and developments in the field of electrical engineering. Radio sound equipment, properly used, can contribute in a large way to a well rounded instructional program.

Better Plant Practices · · ·

No More Squeaks From Desk Drawers

It may sound peculiar to talk about lubricating furniture, but even stranger are those weird noises that are known to come from desk drawers suffering from dust covered runners and rails. A suggestion appearing in the *Model Custodian* embodies a sure-fire remedy—apply a film of common candle wax to the tracks.

"Data from one school doing this work during the Easter vacation," the article states, "showed that it took one man fourteen hours to lubricate 500 drawers. Also that one quarter pound of common candle wax molded into shapes 1 inch square (or round) and 3 inches long was required. The short ends can again be molded together. The whole length of the runners and rails should be lubricated wherever sides, top or bottom show a slight sign of wear."

New Faces for School Blackboards

A large number of experiments have been made in the past few years on resurfacing blackboards while the boards are in position, says Conrad Pykoski, operating mechanical engineer, board of education, Minneapolis. "Grinding machines and lathes have been advocated for this purpose. A large number of these machines work on the dry board. This process creates an enormous amount of dust. This dust flies to every part of the room. The amount of time required to clean the room after these machines are used offers a reasonable objection to their use.

"A long and wide experience in this field of work, has led to the conclusion that the most practical method and the one that gives the best results at the lowest cost, is to do the work by hand with proper abrasive stones. And the first step is to obtain stones of the proper kind, size, grit and bond.

"A few years ago it was the opinion of those interested in resurfacing black-boards that carborundum stones could not be used for refinishing slate black-boards by hand. This has been overcome and carborundum stones are being used very satisfactorily. A stone 2 by 4 by 3 inches is the size that seems to give the best satisfaction. There is a round-back stone that is very convenient for

the hand and works equally as well as a flat stone. The size of this round-back stone is $2\frac{3}{4}$ by 2 by $5\frac{1}{2}$ inches.

"There are a number of stones being used for refinishing blackboards that grind themselves away very rapidly leaving particles of stone on the board that are difficult to remove. These stones are cheap in price, but not in practice. One of the major steps in cleaning blackboards is to remove all particles of grit from the board before any attempt is made to refinish it. . . .

"The next item to be considered is the sponges.

"It is recommended that a large wool sponge be used. Before using a sponge on a blackboard it should be closely examined, especially at the heel, to determine whether or not there is any limestone or sea shells in it. If a sponge is used with limestone or sea shells in it, considerable damage is done to the blackboard. Wool sponges can be purchased for \$0.83 each.

"Cleaning cloths will be found convenient to have on hand. For this purpose the inner lining of sugar sacks is recommended.

"The cost of refinishing blackboards will vary from \$0.90 to \$1.00 per square yard. The cost of material will vary from 7 to 15 per cent of the job."

To Acquire That Marble Finish

It may be found desirable in some buildings to repolish certain parts of the marble work that have lost their finish as a result of cleaning processes or other causes.

"The repolishing procedure," according to the National Association of Marble Dealers, "may have to be varied somewhat because of the character of the surface. In cases in which the polish is only slightly marred, all that will be necessary is to buff the surface with a cloth or chamois skin and some polishing powder. Moisten the cloth, dip it into the polishing powder and rub the surface vigorously until the desired polish is obtained. Polishing powder, or 'putty powder' as it is usually called, can be obtained from marble setters. When a considerable amount is required, it may be found desirable to order it from a manufacturer of such products.

"In cases in which the polish has entirely disappeared and the surface presents a dull or slightly rough appearance, it will be necessary to buff the marble with a fine abrasive before using the polishing powder. Emery flour or No. 220 carborundum may be used for this purpose. When a considerable area is to be polished, it is better to get a marble concern to send a skilled man to do it. It requires considerable skill to produce good results."

Thirsty Lawns Need Care in the Fall

High temperatures and excessive periods of drought raise the question of what to do about the lawns. Will the turf eventually recover? No less an authority than O. M. Scott and Sons Company spreads the comforting message that "good healthy turf can often withstand weeks and weeks of unfavorable weather.

"The greater proportion of these scorched areas will revive to a surprising degree with the advent of fall rains. Mature perennial grasses have become sufficiently well rooted to withstand the dry, hot weather, so those lawns where such varieties predominate will come back. Lawns from new spring seeding have less recovery possibilities and so have those lawns made up of temporary grasses.

"The worst feature of such an ordeal is the encroachment of weeds which are equipped by nature to fight their own battles. During that period of hot weather the grass was dormant and unable to offer successful competition. So weeds had their inning. These weeds are now forming their seeds for next year's growth. Fertilizing the lawn this fall and planting good grass seed will accomplish wonders in reducing the weed menace next year."

AN INVITATION

Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.

Strike Up the Band

By E. A. SPARLING

THE present music program in the Crystal City High School, Crystal City, Mo., was launched in September, 1933. Since that time group teaching of strings, reeds and brasses has resulted in the rapid development of instrumental music.

The groups are classified as beginners, juniors and seniors, and each individual is promoted as soon as it is possible for him to reach a higher classification. The band and orchestra are selected from the senior group, while the beginner and junior groups are maintained as feeders.

From Small Beginning

Starting with a twelve-piece ensemble consisting largely of saxophones, this activity now comprises 125 pupils who are taking instrumental music. From these there are selected a fifty-piece band and a fifty-piece orchestra, with almost complete instrumentation as follows: orchestra instrumentation-ten first violins, ten second violins, two flutes, one oboe, one bassoon, three 'cellos, two string basses, three French horns, three trumpets, five clarinets, two trombones, piano, one sousaphone, three saxophones, tympani, two snare drums and a bass drum; band instrumentation-fourteen clarinets, two flutes, one oboe, one bassoon, three alto saxophones, two French horns, three mellophones, one baritone, six trombones, nine trumpets, two sousaphones, one string bass, three snare drums, one bass drum and a tympanum.

By the end of the second year the senior orchestra had reached a membership of forty and in the interscholastic contests in the district, sponsored by the Teachers College at Cape Girardeau, was declared winner of first place in Class B. The second year, the band of thirty ranked fourth, four points under the winner. This, the third year, a fifty-piece band and a fifty-piece orchestra each scored first rating in the interscholastic meet at Cape Girardeau. The boys' glee club also took a No. 1 rating and the mixed chorus of forty-eight voices took second place both in the district and state meets this spring.

To foster such an activity and to assure its continued success the superintendent must have the complete sanction and support of the school board. He must also possess ingenuity and considerable imagination. He must know the kind of program that will fit his particular school and arrange schedules so there will be no conflict with other subjects; at the same time the school must afford every pupil an equal opportunity to share in the musical program if he so desires. Approximately 60 per cent of the entire enrollment in Crystal City High School now takes music.

This project entails adequate facilities for conducting rehearsals in quarters that are treated with sound absorption. It means necessary accommodations in the physical plant for storing uniforms, instruments and music

Board Furnishes Large Instruments

The school board furnishes the oboe, bassoon, sousaphones, string basses, 'cellos, baritones, tympani and drums. Pupils furnish all the smaller instruments. At the beginning there were twelve instruments owned privately by high school pupils. About 125 pupils have instruments today, the majority of which have been purchased within two years.

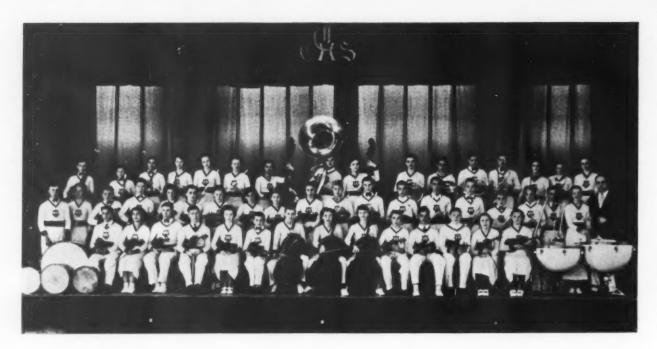
The office and instrument rooms in the Crystal City High School are 14 by 14 feet and are separated by a plate glass partition, making it possible for the instructor to conduct individual classes of small groups, and at the same time supervise small group practice in the adjoining room for the delayed pupils.

In the office are book shelves for band and orchestra books that have been taken from the files and are in use every day or until the instructor is ready for new practice material. The filing cabinet, also in the office, consists of shelves with a depth of 16 inches, 4 inches apart, suitable for band and orchestra music of large size, and also for octave music for the chorus and glee clubs. The shelves are labeled in three sections: band, orchestra and chorus, with a separate door for each. Outside dimensions are 6 by 8 feet.

Plan of Instrument Room

The room adjoining the office contains shelves extending the width of the room (14 feet) with a depth of 28 inches for the violins and trombones, and smaller compartments for the smaller instruments. On the top shelf, 6 feet high, is a projecting wide ledge giving ample width for storing the large sousaphones. Beneath the lower shelf is ample space for tympani, drums, baritones and French horns. The 'cellos and string basses are hung on the side of the wall. This is simple to do. A large screw eye is placed in the wall at the proper height and a loop of heavy cord or chalkline is slipped under the scroll. They hang perfectly and are safe from accident.

When the bell rings for rehearsal each person passes to the instrument room, gets his instrument and takes his chair, which has been previously placed by the librarian, who has also set up the stands and placed the



music in readiness. The children may return their own instruments to the shelves or take them home.

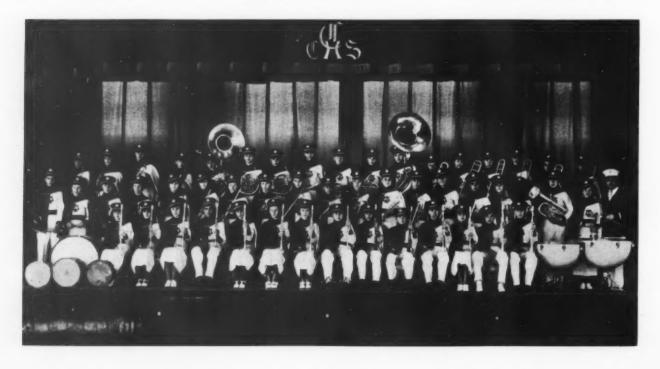
The rehearsal room is 33 by 52 feet. This gives proper spacing and allows the instructor to pass between stands easily, in order to make the suggestions to various sections.

Both the ceiling and the floor are built with sound-absorbing materials making the room acoustically correct, and this enables the instructor to detect minute flaws in tone and harmonic relations. Light is provided on three sides, practically all the space Approximately 60 per cent of the enrollment of Crystal City High School takes music. The school furnishes the larger equipment, and the small instruments are purchased by the pupils. Above is the orchestra.

A prize winner—the Crystal City High School band—is shown below, dressed as a star organization should be. Just off the stage is the instrument room.

being built in with glass. Ample artificial light is available for use on dismal days and for evenings.

Much of the glamour that surrounds the school band and orchestra centers upon its dress. Careful attention, therefore, must be given to uniforms. Owing to the changing personnel of the pupils, caps and capes are furnished the Crystal City High School band. The P.-T. A. organization sponsored a drive for funds for this purpose and the outfits are lent to the pupils as long as they remain members of the organization.



The caps and capes are of broadcloth, Yale blue in color, and are trimmed in gold silk braid. Cape linings are of white satin. On the outside corner of the right side is the monogram in gold "C.C.H.S." When the cape is worn with the corners thrown over the shoulders, an inside monogram, "C.C.H.S.," is exposed from the back. Caps are of military style and trimmed in gold with large gold eagles in front with the school monogram above. The boys in the band furnish their own trousers, which are of white flannel, and the girls furnish their skirts, which are of white serge.

An additional feature of the uniform is a white wool sweater, slip-on style. It has a V-shaped neck band with a blue border, and the border is

repeated on the cuffs and at the bottom of the sweater. On the breast is a decoration, a 6-inch blue lyre. The sweaters are worn under the capes and are an outstanding part of the uniform, especially when the corners of the capes are worn over the shoulders. Yale blue was selected irrespective of school colors because in the course of several years this color is not likely to lose popularity.

At the end of the school year the uniforms are folded and laid in pasteboard boxes. A sufficient number of moth balls are placed in the boxes and they are sealed. Caps are also stored in a like manner. The boxes are placed in the instrument room for the summer.

Most of the pupils double in band and orchestra. Since the cap and cape are too militaristic for orchestra use, the boys and girls remove their caps and capes, wearing only the white skirts or trousers and white wool sweaters with the blue trimmings; this makes a striking uniform for an orchestra. The sweaters were specially designed. They are not full length, but are made short and are better known as sweater vests.

The first requisite of a successful music program in the high school, which should include both vocal and instrumental, is the cooperation of everyone concerned, the school board and the superintendent. Then a carefully planned program must be evolved that will offer no conflicts with the prescribed courses of study. Finally the physical plant must be arranged to provide proper facilities.

How Far Can the Board Go?

By BOYCE L. GUMM

oards of education have wide discretionary powers. What limitations, if any, have the courts placed upon them? How far may boards of education go in the matter of exercising their discretion when their acts are restrained by statute? These questions have been answered fairly accurately by the courts of Ohio and Texas.

In a recent case adjudicated in the state of Ohio a board of education was not permitted to exercise its discretion in awarding a contract for labor and material as a whole because the statute in effect stated that the bid should state separately the price for labor and material. The statute was strictly construed.1 In another case decided in the same state the board of education could exercise its discretion in refusing all bids but it was not permitted to award the contract to a bidder, unless the bid was the lowest in the aggregate for both labor and material.2 It was also held in another decision in Ohio that a board of education may not resubmit the question of issuing bonds to raise money to provide a heating plant for a school building where the original bond issue failed to provide sufficient funds for the completion of the building.3

An Ohio court in deciding in favor of a school board said: "It has been held with almost complete uniformity by the courts, that there is no judicial power to interfere with that discretion which is given to the public bodies like city councils and boards of education in the discharge of their duties, unless there is apparently an abuse of such discretion."4

The courts of Ohio seem to support the principle that when the statutes fail to provide the how or the when for business transactions boards of education may exercise their discretionary powers but when the statutes give the how and the when the statutes will be strictly construed and the courts will not allow boards of education to exercise their discretion.

A Texas court declared in 1917 that a board of education was not required to accept the lowest bid it received. The board of education was permitted to exercise its judgment in such matters and to make its choice on the basis of the lowest responsible bid. It was not required to accept the lowest bid.5

If the acts of boards of education are free from fraud, collusion, corruption and dishonesty the courts will not interfere with their discretionary powers or judgment, unless such acts are governed by statute. When there are statutes governing the acts of boards of education such statutes are most likely to be strictly construed and boards of education will not be permitted to exercise their discretion.

²State ex rel. Mathis Brothers Company v. Board of Education of the City of Cincinnati, 6 C. C. Ohio (N. S.) 345 1905.

³McAlexander et al. v. Haviland Village School District et al., 7 N. P. Ohio (N. S.)

School District et al., 7 N. P. Omo (M. 590 1906, Goslin v. Toledo Board of Education et al., 11 C. C. Ohio 195 1908.

⁵Stapleton v. Trussell, 196 S. W. 269 (Tex.) 1917.

¹State ex rel. Bryce Furnace Company v. Board of Education of the City of Toledo and the Smead Furnace and Foundry Company, 4 O. N. P. 44 1896,

Built for Star-Gazing

By MARJORIE CORDLEY COIT



Main Observatory

BOUT forty boys have worked on the Edgewood School observatory at one time or another, but the idea originated with a boy from California. As a high school freshman he came to the Edgewood School in Greenwich, Conn., because there in the school shop he could realize his ambition to build a telescope while preparing for college. Through his four years at the school he worked on lenses and mirrors and frames and completed parts for different telescopes. When he was graduated and went on to the University of Chicago, there remained at the school as product of his craft an 8-inch telescope ready to set up.

But the double-yoke mounting of the frame had to be placed on piers and permanent protection provided before the instrument could be used for observations. An interval elapsed before funds for materials were presented and the boys of the high school volunteered to do the work.

In 1934 the building of the observatory was made a part of the program for the year under the direction of John L. Wallace, head of the Edgewood School shop, who had directed the work on the telescope. A place well suited to the purpose was selected where native granite gives a foundation for the building.

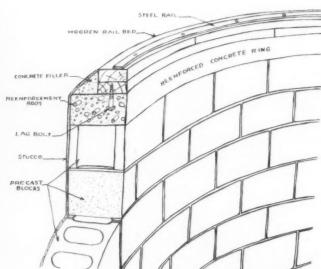
In the excavation the boys laid out the location of the foundation wall, which had an inside diameter of 12 feet. Within the wall they located the pier for the telescope, which is enclosed by the building but separate from it.

To anchor the concrete foundation an operator with an air drill was employed by the hour. He bored holes 8 inches deep at 18-inch intervals around the foundation. Over the area of the base of the pier he bored fifteen more holes. In each hole the boys placed a ¾-inch steel bar and secured these bars with melted lead to ensure their steadiness as anchorage for the concrete foundation wall that finally enveloped them.

Forms for the concrete were next built, circular on the inside, twelve-sided on the outside, and 12 inches thick. In the exact center of the building a 3-inch pipe was set in the concrete base for the pier so that it stood 10 feet above the foundation. It was carefully guyed to a rigid perpendicular and after the foundation was complete, it supported a 6-foot swinging bar that was hung on it to act as a giant compass. By means of this bar each of the building blocks was put in place on the circular wall.

Precast cinder blocks were used for the wall. These the boys made in forms designed to fit exactly the circular wall of the building. To avoid unnecessary weight the blocks were poured with three cores, and they were laid so that the solid webbing of one overlapped the webbing of the





Detail of wall construction of observatory, built by the pupils, showing the perpendicular center pole and the radial bar by which the blocks were set in place on the wall, which has an inside diameter of 12 feet.





Boys completing the form for the foundation wall are shown in the picture at the left. On the right is seen the slope of the excavation. Below, a pupil is welding the edges of the copper sheathing.

row below. The blocks were laid with mortar as in any masonry and each was located in its place by means of the bar hung on the central pole.

The completion of the wall presented special problems since the dome was to rotate on it. Accuracy in the circular wall had been ensured by means of the radius boom. On top of the blocks two bands of sheet iron were placed. They rose 6 inches above the top of the wall and followed the inner and outer surfaces of the blocks. Inside this form three rows of 3/8inch concrete reenforcement rods were run completely around the building and suspended within the form by means of wires so that they did not touch the blocks. Then the form was filled with concrete and it made a reenforced band 6 inches high and 10 inches wide upon which was set the track carrying the rotating dome.

Before pouring the concrete a circular wooden base was prepared to support the steel track. It was made of laminated strips of wood, 13/8 inches high and 4 inches wide, which were cut to a radius of 6 feet on the inside measurement. Into the bottom of these strips were run 5/8-inch lag bolts which protruded about 3 inches. When the rim was filled with concrete and still soft, the wooden track was placed on it and the lag bolts penetrated the concrete and anchored the wood on top at an accurately determined level. Since the wooden track was only 4 inches wide, a step was left on the concrete rim. This

was also filled and formed a beveled edge which provides drainage under the overhanging dome.

The steel track for the dome was last placed on the wooden base. Four pieces of flat steel, 2 inches by ½ inch, formed the track and they were fastened to the wood by counter sunk screws.

The piers for the telescope were built on a saddle of poured concrete.

The construction of the dome involved problems in architecture that were difficult for the pupils even under most competent leadership.

After the skeleton of the dome was complete the ribs were covered with light beaded ceiling cut to fit each segment, and then the entire hemisphere was sheathed in copper.

The edges of the copper covering were next hammered flat and then soldered with an acetylene torch to form a weatherproof surface. This work was carried on during the winter in a large hall in the school building where the door space was ample for ordinary purposes but where a hemisphere more than 12 feet in diameter presented an unusual exit problem. This was solved by a special feature of the constructon of the dome. It was built as a unit but so bolted that it could be divided into halves.

One day late in May the completed dome, which weighs about 2,000 pounds, was divided by unfastening the key bolts. An enthusiastic crowd of boys lifted the two parts of the hemisphere through the doors, placed



them on a hand cart and dragged them to the base of the observatory wall. There the dome was bolted together again, placed on skids and lifted, pushed and pulled into place on the track prepared to receive it. The dome revolves on six wheels which run on the steel rail and they are kept in place by six opposing wheels.

The correlation between these projects and the classroom has vitalized the college preparatory work in mathematics and physics. Pupils worked out the mathematical and geometric relationships involved in the construction, and resorted to the principles of physics to solve many problems during the progress of the work. Younger pupils who assisted in the building grew to respect the knowledge that carried the work along so successfully, and all learned the value of cooperative effort in making this contribution to the school community.

The Law Looks on Heating

By J. K. STONER

N EXAMINING the heating and ventilating laws and regulations of the various states it is found that 22 states have school laws and regulations of boards of education, upon which two or more states agree, affecting the construction and installation of systems and equipment in school buildings; 23 states have health laws and regulations of boards of heath; 22 states have rural school laws or laws affecting schools with four rooms and less; 15 states have fire laws and fire marshal regulations, and four states have building and heating and ventilating codes upon which two or more states agree. All the states except New Hampshire and North Carolina have laws upon which two or more states agree.

A check of the temperature requirements of the states specifying the capacity of their heating systems to determine if the requirements are greater in the Northern states than those in the Southern states reveals no significant difference. It is generally agreed, however, that the climatic conditions are more temperate the year around in the Southern states. The bureau of engineers of Florida declares that heating and ventilating are not problems in their state, although the law requires the "state board of education to do whatever is necessary in regard to heating and ventilating."

Combined With Ventilating

Forty per cent of the states having some provision for heating and ventilating have also some requirements regulating heating and ventilating as a combined unit. For example: seven states permit certain kinds of heating systems only when used with a system of ventilating. South Dakota permits the gravity system of ventilation provided it is used with steam heat. Three states require and two states permit the ventilating system to be part of the heating system or to be designed in connection with it.

Maryland requires that the heating system must be designed only as a part of the ventilating system. In Pennsylvania, steam is permitted when used with the split system of combined heating and ventilating. Twenty-one states permit ventilating room heaters and jacketed stoves for rural schools, and these are considered a type of combined heating and ventilating or at least a step nearer that direction than the old unvented, unjacketed wood or coal stove.

Mention of Specific Products Rare

It is usually not considered good practice for a public agent to show favoritism in the letting of contracts by specifying that certain products or manufacturers' equipment be used rather than some other kind. New York and North Dakota require that no particular manufacturer or products are to be specified in plans for schools. North Dakota makes certain exceptions to this provision.

Most of the states, mentioning some particular product or manufacturer, do so in the form of a recommendation or through permissive legislation. This, of course, shows preference but does not require the recommendation to be enforced.

According to the Idaho department of education, that state's heating and ventilating rules and regulations are much out of date and architects are not held to the regulations now in force. Michigan's detailed heating and ventilating laws were repealed, but the state superintendent of public instruction still has the power to pass upon school heating and ventilating, and this provides some check on conditions in that state.

In 1925 the state superintendent of Louisiana appointed a committee, composed of three members of the state department of education who were best qualified to pass on the plans and specifications, and assigned to it the duty of making a study of this problem. Louisiana gets fairly good results through this method of controlling the preparation of plans and specifications for school buildings. The state does not have an officer connected with the state department of education to supervise building construction. School boards throughout the state employ competent architects for this purpose.

The enforcement of the rural school health code in Missouri is left strictly to the county health officers, and for this reason the code is not universally enforced. In South Carolina a committee has been engaged to compile a state building code that incorporates heating and ventilating requirements.

Many Laws Are Not Enforced

The regulations of the board of health of South Dakota are quite old, and since their adoption there has been considerable advance in the heating and ventilating of school buildings. For this reason the health code is not rigidly enforced, especially in the larger schools.

It is interesting to note that the health laws and regulations of Minnesota and South Dakota are identical. Minnesota's health laws were passed by the board of health on Jan. 9, 1912, while the health laws for South Dakota were effective Aug. 20, 1913.

In spite of the wide disparity in

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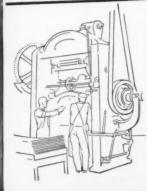
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heating and ventilating laws and regulations, there are practices on which the agencies of the various states agree. Hence it may be assumed that these form the consensus as to what should make up a body of minimum standards or practices. These minimum standards or practices on which the states generally agree would be as follows:

- 1. Plans for heating and ventilating of school buildings should be approved by one or more of the following state officers or boards: architect, board of education, board of health, department of labor and industry, fire marshal, superintendent of public instruction.
- Plans for heating and ventilating should specify certain statewide or nationwide heating and ventilating standards in order to be approved.
- 3. Provisions should be made by the state department of education to have an inspection made of the construction of heating and ventilating systems and equipment and a check on their efficiency and defects after installation.
- 4. The state should require that provisions be made for adequate heating and ventilating, or both, when the climatic conditions justify such provisions.
- 5. Each pupil should have between 15 and 18 square feet of floor space in the schoolroom. Each pupil should have 200 cubic feet of air space and should be supplied with 30 cubic feet of air per minute.
- 6. Recirculation of the heated air should be allowed during certain hours of the day when the outside air is extremely cold. Recirculation of air permits a saving of fuel, but unless the practice is restricted to certain occasions, it may be detrimental to the health of the occupants of the schoolroom.
- 7. Temperature is not the only factor to be considered in heating. The required temperature varies in twenty-eight states from 60° to 72° F., depending upon the outside temperature and the moisture in the air. Every classroom should be provided with a thermometer.

- 8. The average relative humidity of nine states is 39 per cent. However, this may vary from 30 to 60 per cent. Provisions should be made in all schools to humidify the air.
- 9. Fresh air for ventilating and heating should be taken from some uncontaminated source and introduced at least 5 feet above the floor.
- 10. Jacketed stoves or ventilating room heaters should be installed in schools with less than four rooms. Hot air, steam and hot water heat should be permitted in schools with more than four rooms, provided they are used with window, gravity or mechanical ventilation. The ventilation system should be a part of the heating system or installed in connection with it. Stoves without jackets should not be permitted in school rooms.
- 11. The blast system, which is primarily constructed for combined heating and ventilating, should be permitted in schools with more than four rooms.
- 12. Warm air supply registers should be located not less than 5 and not more than 8 feet from the floor.

- 13. All boiler rooms should be fireproof.
- 14. Smoke pipes should be guarded by metal or built-in thimbles when passing through combustible material.
- 15. All foul air in the school building should be expelled through a register, located near the floor on the same side as the warm air supply, to a vent flue which extends through the attic above the roof and connects with an approved roof ventilator.
- 16. The foul air ducts should be constructed of fireproof material and equipped with adjustable dampers.
- 17. The cross-sectional area of the foul air ducts should be from 8 to 14 square inches per pupil.

Although modern heating and ventilating science does not agree with all these practices, they are set forth to show what really exists and what standards are actually being enforced. If these standards do not comply with good engineering practice, then it is up to the taxpayers and schools to see that the laws and regulations are changed to meet the demands of a modern world.

Reducing Heating Costs

N REDUCING heating costs there are several factors to take into consideration: size of plant; grade or mixture of fuel; weatherstripping and caulking; storm windows; submerged water heaters; valve operation; cleanliness, and stokers.

An undersized boiler is an expensive piece of equipment, according to V. Floyd Woodard, writing on heating cost reductions in *Buildings and Building Management*. It requires heavy firing under normal conditions and under extreme conditions is unsatisfactory. As to fuel, the cheapest grade obtainable will be low in B.T.U. content, high in ash and troublesome. Nor is it economy to burn the most expensive grade. The best results may be obtained from a mixture of two grades.

Weatherstripping keeps out dust

and keeps in heat. All openings should be caulked, a process neither expensive nor difficult. Windows should be made airtight. The installation of storm windows is more than justified when they are properly used, for they minimize the effect of ice cold glass on the warm air.

Submerged water heaters eliminate the need of maintaining and firing two heating plants and supply hot water with a much cheaper grade of fuel. Radiator valves should be checked periodically.

Boilers must be cleaned frequently. Flue cleaning may be neglected, and frequent and regular inspection of boilers and flues for this cleanliness is necessary.

The stoker increases the efficiency of the undersized boiler 15 per cent.

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Next Year's Cafeteria

By CLIFFORD ETTINGER

N THE entire field of secondary education no educational resource is so little appreciated and so poorly utilized as the high school cafeteria. Fully utilized and properly organized the cafeteria may well be an educational gold mine.

To make its greatest possible contribution, the cafeteria must no longer be looked upon as a separate commercial entity distinct from the rest of the school. It should be regarded as one of the important educational units. It should be studied and organized in the light of the contributions its distinctive features enable it to make to the cardinal objectives of education. Jobs integrated with their studies can be provided for pupils in the school cafeteria. These girls of Haaren High School, New York City, are acquiring accounting practice. Such jobs as these should be held briefly and spread among a large number of students.

The cafeteria may assist educationally: (1) by providing jobs for pupils—jobs related to their studies, and (2) by cooperating with various departments of instruction.

Historically, school feeding has gone through three stages in this country.¹ First, outside agencies undertook to feed poor children in the school. Later, concessionaires were employed to extend the convenience of school lunches to all pupils. The obvious disadvantages of this arrangement led to the third stage in which control of the cafeteria is completely in the hands of the school authorities.

Generally speaking, most schools now find themselves in this third stage of development. In the earlier part of this period, the responsible educational officer turned over the executive management to persons who were generally not specialists in this work. In the later part of this period, control was often divided between a dietitian and a teacher of accounting or mathematics.

In many cities, at a somewhat later point in this period, control of the cafeterias was centralized in the hands of highly specialized experts. It is likely that principals and teachers did not then and do not now realize the opportunities for teaching through the cafeteria and, therefore, have permitted this isolation of the cafeteria to develop.

When control of the cafeterias was given to dietitians and accountants

¹Bryan, Mary deGarmo: The School Cafeteria.

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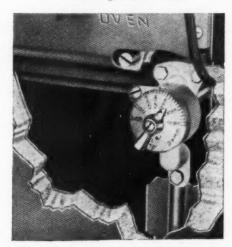


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THE TREND TODAY IS TO GAS-THE MODERN ECONOMICAL FUEL

there was a vast improvement in technical operation. Operating efficiency has been increased; better food in greater variety has been served for lower prices; nutritional values and adequate food combinations have been stressed.

Yet it is precisely because the cafeterias are largely controlled by specialists that they have not reached their full educational development. In support of this statement, consider the backgrounds of many dietitians. They have specialized in nutritional chemistry, large quantity cooking, purchasing, personnel administration, menu making. Their academic education has trained them to be managers primarily, not educators.

When Dietitians Administer

When dietitians are given charge of a cafeteria their purposes are influenced more strongly by commercial considerations for two reasons:

(1) they do not have faculty standing, and (2) their continued employment depends, in large part, on their ability to show a profit at the end of each term.

What do dietitians consider their major problem? To give the children the best possible food at the lowest cost. This leads to the consideration of problems common to all business enterprises, not only those of a non-profit making nature. Where can they buy most cheaply? How can they increase the volume of sales of hot food, of milk? What quantity of potatoes should be prepared tomorrow?

It follows that today many dietitians by training, experience and interests are not capable of making the school cafeteria yield the greatest possible educational good. This is evident, in spite of the useful and indispensable services that they render in the field of their specialization. In addition to their technical professional work school dietitians should have some training in education.

Consider next the background of the other factor in control of some cafeterias, the accounting teacher or business manager. When he was a student his field of specialization was business, with special emphasis on accounting. Training was narrow and strictly vocational; there are many accounting teachers who never had a course in education prior to their appointment as teachers. In many cases, the limitations of their training exclude them also from giving the type of educational leadership that is needed.

Since the accounting teacher's student days a revolution has occurred in the field of commercial education, a revolution whose deeper significance all too often escapes him. Commercial education today sees its broad relation to secondary training; it has added to its primary vocational objective, social objectives. To meet shifting occupational trends in business it is differentiating its curriculums by adding to the older accounting and stenographic specializations, work in retail selling and general clerical practice. Many educators with a concept of culture as adaptation to one's own environment are urging general business training for all pupils.

Studies and Jobs Unrelated

With this change in the commercial curriculums and objectives there has come also a change in teaching methods. Progressive methods have supplanted older conceptions of the teaching process. The techniques and spirit of activity methods have been applied in commercial work. The child must live his commercial education; he must feel the reality of the problems presented for his solution; he must learn by living in a life situation.

At the same time that many educators are striving so valiantly, and in some cases, so vainly to produce this atmosphere in the classroom, many existing real life situations are passed over.

Specifically, instead of permitting pupils to have the experiences of ordering, selling, handling cash, answering the telephone, using the adding machine, keeping records and the like, this work, in a real situation within the school organization, is assigned to adult workers. Justification of this

practice is based on the argument that adult help is cheaper than pupil help. Bryan and Zabriskie in a study of this problem came to the following conclusion: "Adult help is somewhat more efficient; student help works for lower wages. The net result is a negligible difference in expense."

Commercial educators are generally agreed that some kind of practical experience on the job is extremely desirable. To that end theorists have devised a system of cooperative training. It is one of the most beguiling of educational ideas. Absorb theory for one week in school; the next week apply what has been learned on the job. Whatever merit this scheme has as a money-making device to help poor boys and girls remain in school, it is an educational fraud. The school feels elated if it is able to find any job at all for a pupil. The business man is pleased to be able to obtain cheap labor.

What logic is there in teaching a girl stenography and then getting her a job in the "five and ten" as a salesgirl in spite of the defense of this action which would be made by those who believe in education by bribery? How much better it would be to give her a job in the cafeteria office taking dictation under the direct control of the school authorities where her job can be coordinated with her studies.

Why Hire Adult Help?

While all this hocus-pocus of unrelated job and studies is going on in the field of cooperative training, what is happening in the school cafeteria? Jobs that are under the direct control of the school authorities are given to adults. Jobs that will provide ready made many of the life situations our progressive educational leaders are so anxiously looking for are educationally wasted. Jobs that will provide opportunities for the development of those skills, habits and attitudes that we so earnestly desire to develop are carelessly passed over.

What steps should be taken to remedy this situation?

Control of the cafeteria should be placed in the hands of a person who

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will be qualified to develop it to its fullest extent. Such a person's point of view will be essentially and fundamentally educational with a knowledge of the broad trends in secondary education and a further knowledge of the trends in industrial and commercial education. A knowledge of the activity movement and the integrated curriculum as well as of current philosophic and psychologic trends is urgently indicated. Finally, it will be necessary for such a leader to see the functioning of the school as a whole and to be cognizant both of the distinctive contributions of the cafeteria and of those contributions it can make by cooperating with other departments.

It will then be necessary to reorganize the cafeteria to provide as many opportunities for pupils as possible. Merely providing any type of job will not be sufficient; the work in the cafeteria must be integrated with the classroom activities. Jobs of the following types may be offered in the cafeteria:

Art Department: sign painters, poster designers.

Industrial Arts: carpenters, plumbers, electricians.

Science Department: moving picture operators.

Accounting Department: office managers, bookkeepers, cashiers, auditors.

Stenography Department: secretaries, typists, mimeograph operators.

Retail Selling: all selling positions except at the hot food counters.

General Clerical Practice: general clerks for money and food control records: stores control, perpetual inventory, daily food cost, payment of invoices and payrolls, etc.; file clerks.

Routine Jobs for Slow Pupils

In addition, there are many other routine jobs such as waitress in the teachers' cafeteria, bus boy and dishwashing machine operator that offer tremendous opportunities of inculcating correct attitudes in problem children of low intelligence. Pending the establishment of vocational schools devoted to the hotel and restaurant

industry, training of this sort can be given to a limited extent in the cosmopolitan high school. A large number of pupils working for service credit will be needed to attend to the orderly running of the cafeteria: sanitation squad, traffic squad, chess and checker squad.

It is my belief that pupils who perform the regular business activities of the cafeteria should receive a modest remuneration. Those who perform work of a social nature should be rewarded with service credit. The suggestion that follows is easier to make than to put into effect but unless it is carried out the beneficial effects already implied will be limited to a group of pupils too negligible in number to achieve the results desired. Some plan should be adopted whereby pupils will perform assigned duties for a period of, let us say arbitrarily for the moment, two weeks. Then, these experienced pupils in turn, will train successors. In the course of one year under this plan, about one-third of the student body would receive the benefits of training in the indicated real life situations.

Alliances With Various Studies

Another problem to be faced is the development of new and more fruitful methods of cooperation with various departments and officials. Means by which the work of the cafeteria may be integrated with instruction in various fields follow:

Art Department. Signs and posters are continually needed. Improvement in the layout, furniture, decorations and color schemes of the cafeteria provide much material for classes in art appreciation. Classes in art weaving and sewing can make curtains and other similar items needed in the cafeteria. Pottery classes might design and execute table and other ornaments. Exhibits of the work of faculty and outside artists in the cafeteria have aroused much favorable comment.

Biology and Health Education. By synchronizing the teaching in the hygiene and biology classes with the work of the dietitian much may be done to help the formation of good health habits. In addition, the health education department may discover the extreme cases of malnutrition and turn them over to the cafeteria for special treatment.

Civics. Integration here would seem to be in the nature of a student self-governing body to regulate conduct in the cafeteria. Theorists say that this would be valuable training in democratic processes. Practical administrators say that the scheme has more disadvantages than advantages. The difficulty seems to be that the severity of treatment of fellow pupils leads to a great deal of trouble.

Good Business Training

Accounting. Advanced classes may keep duplicate sets based on the lunchroom operations or make complete audits of the cafeteria records of past terms. Accounting classes would also supply pupils for the types of positions previously indicated.

Arithmetic. The checking of actual invoices, statements and payrolls will motivate necessary drill. The adding machines may be borrowed and instruction and practice given in their use.

Economic Geography. Through the courtesy of vendors trips may be arranged to markets, fruit auctions and bakeries to synchronize with the study of various food industries.

General Clerical Practice. All office equipment should be at the disposal of these classes for use in classroom instruction: adding machines, coin counters and sorters, staplers, money sealing devices, postage scales, files. catalogues and reference books.

Junior Business Training. The last statement applies to this subject with equal force. In addition, two illustrative situations indicating the manner in which the cafeteria may be used for commercial teaching will be described. In connection with the work of the stock clerk the meaning and method of inventory taking must be taught.

In one school the procedure to be followed is explained in class. The next day the class meets in the cafe-

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teria storeroom and takes an actual inventory of the goods it finds there. The teacher does not have to create a life situation in this case; he merely has to bring his pupils to it. This procedure results in a spontaneous purposeful activity.

The second illustration has to do with the work of the cashier. The system of checking cash, making change, proving cash and preparing cash for deposit is explained in class. The steps to be followed by each member of the class the next day are worked out in detail. The next day the class meets in the teachers' cafeteria where each member gets an opportunity to do the work of the cashier. Actual money is used and the whole situation is dramatized in its natural setting by having the pupils act as patrons and cashiers.

Cooperation With the Deans. Most important in this connection would be the improvement in manners. This may be accomplished in part by the giving of specific directions in etiquette and by the use of films. An article reprinted in the "Reader's Digest" for August, 1936, entitled, "Invisible Eating" by Gelett Burgess is recommended.

Another method suggested is that some or all of the teachers dine regularly with the pupils. The objection of some teachers to this proposal is based solely on the excessive noise. It is to be hoped that in new installations sound-deadening material will be used in floors, walls and ceilings to overcome this objection.

In order to make various social activities a success the deans will need the cooperation of the lunchroom in after-school events. In some schools, regular programs of social activities are being organized for the lunch period. These include the promotion of chess and checker tournaments, the reservation of space for clubs, the showing of films on food and other subjects in the cafeteria. When this work is under the control of the deans it would be turned over to the cafeteria manager under the type of organization suggested.

In New York City, as in many

other cities, indigent children are cared for on a large scale and on a well organized basis. In those communities in which this is not the case the recommendation of the deans to employ a particular pupil may be of the utmost importance in the life of the pupil, even to the point of de-

termining whether or not he will be able to remain in school. Also, in certain other cases in which boys or girls need to develop self-confidence the simplest routine job in the cafeteria satisfactorily performed over a period of time may prove to be the solution of the problem.

Noon Hour in the Rural School*

OUNTRY children have a long, active day and need three good meals, one of them a school lunch. Most of the lunches brought from home contain sandwiches, cold and solid foods.

To help make these cold foods digestible and appetizing, the children may be furnished with a hot, light dish such as a cream soup. Schools have found this makes the afternoon work go more easily.

The club idea may be used, the children choosing a committee each week to help plan a hot dish; to make the schoolroom (if the lunch must be served in the schoolroom) ready by airing it; to serve the hot dish; to wash and sterilize the dishes, and to put them carefully away.

In some places mothers put up extra cans of vegetables to reduce the cost and the time of preparation of the lunch at school. In other places children bring money at the first of the month so their teachers may purchase No. 10 cans by the dozen, wholesale. This size can contains thirteen cups, or six pounds, of vegetables. Cans of evaporated milk are convenient for a stormy day when the milkman fails to come.

The following are suggestions for the hot dish: cream of tomato, pea, corn, celery or carrot soup; vegetable soup; spinach with hard-cooked egg; stewed tomatoes and corn; baked potatoes; baked apples, and weak cocoa. Suggestions for the lunch box from home include:

*From material prepared and distributed by the Massachusetts Department of Public Health, State House, Boston, Mass.

- 1. Sandwiches, preferably of dark bread with a vegetable filling of chopped cabbage or raw spinach, celery and nuts, or lettuce; or with a more substantial filling, if it is to take the place of dinner, such as lettuce and egg, nut and date, peanut butter and raisin, chopped celery and nut, or meat.
- 2. Fresh, raw vegetables or fruits such as celery, carrot strips, cabbage, tomatoes, apples, oranges and bananas.
- 3. Sometimes a dessert such as fruit candies or molasses cookies.

Following are some recipes that may be prepared on one burner.

CREAM OF TOMATO SOUP

One No. 10 can of tomato purée, 2 gallons of milk and 2 2/3 tablespoons of salt. The purée and the milk should be mixed cold and heated. Add salt, a little butter and serve immediately. If thickening is desired, mix one cup of flour with one cup of the whole milk; add the scalding milk to this gradually. Pour into the vegetable mixture and stir until it thickens.

CREAM OF PEA, CELERY, ETC.

Make by the foregoing recipe, substituting the chopped vegetable desired.

TOMATO AND CORN

(Serves 43)

One No. 10 can of tomatoes, 4 No. 2 cans of corn, $1\frac{1}{2}$ tablespoons of sugar, 4 tablespoons of salt, $\frac{1}{2}$ cup of butter (if desired). Add the tomatoes to the corn and heat, being careful not to burn the mixture.

Spinach With Egg (Serves 40)

Hard cook six eggs; heat 2 No. 10 cans of spinach, add 2 tablespoons of salt, $\frac{1}{2}$ cup of butter, 2 tablespoons of vinegar. Serve half cup to each child and decorate with slice of the egg.

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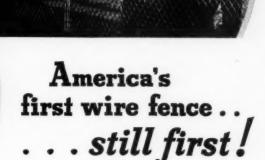
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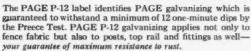
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NEWS IN REVIEW

Business Officials

When Missouri welcomes a visitor, she manages to make him feel welcome. Thus, when the delegates to the National Association of Public School Business Officials assemble at St. Louis on the morning of October 13, they will be greeted three times: by the state superintendent of schools, Dr. Lloyd W. King; by the president of the board of education of St. Louis, James J. Fitzgerald, and by the superintendent of schools of St. Louis, Dr. Henry J. Gerling. John S. Mount, vice president of the association, will give the response.

Program topics for that day include the business manager's job, by Col. Howard P. Savage, business manager, Chicago board of education; handling supplies in a small city, by R. L. James, secretary, Mason City, Iowa; efficient control of the custodian engineer force, by L. H. Rich, director of personnel, Detroit board of education; business methods in public service, by Dr. Isidor Loeb, school of business and public administration, Washington University; credit unions, by William C. Bruce, editor, American School Board Journal; cleaning and sanitation problems, by Dr. W. W. Carpenter, professor of education, University of Missouri; modernizing old school buildings, by A. A. Knoll, business manager, board of education, Long Beach, Calif.; North Carolina system of state control, by M. M. Fowler, business manager, public schools, Durham, N. C., and reducing school bills through consolidation of districts, by Walter D. Cocking, state commissioner of education, Nashville, Tenn.

A discussion of the assumption by states of financing capital outlays for school buildings by N. E. Viles, director, school building service, Missouri Department of Public Schools, will open the Wednesday session. Among the other talks scheduled for the fourteenth are an adequate and modern annual report, by J. D. M. Crockett, public accountant, Kansas City, Mo.; a selfsurvey of school business management, by George W. Grill, assistant superintendent of schools and business manager, Lakewood, Ohio; determining the costs of an adequate and efficient school bus system, by I. O. Friswold, director of buildings and building administration,

Other program topics for the day include the business manager's function in

controlling a school budget, by Dr. John Guy Fowlkes, professor of education, University of Wisconsin; efficiency and economy through visual education, by Ralph Irons, superintendent of schools, Evansville, Ind.; reduction of high school costs, by Dr. Henry J. Gerling; federal projects, by H. F. Alves, U. S. Office of Education; building for the work-study-play plan of organization, by Dr. Leonard Power, U. S. Office of Education; financial aspects of maintaining and operating platoon schools, by G. E. Wulfing, superintendent of property, public schools, Gary, Ind.; air conditioning in public schools, by John Howatt, chief engineer, Chicago board of education; merit type teachers' salary schedule, by Willard E. Goslin, superintendent of schools, Webster Groves, Mo., and minimum essentials for school business management in the average size city, by Dr. N. L. Engelhardt, professor of education, Columbia University.

A panel on "Cooperation Between the Federal Government and the States and Their Local Governments in the Support of Public Schools," with Dr. Fred Engelhardt as leader, will occupy all of Thursday morning. The speakers on the panel are Doctor Engelhardt, professor of educational administration, University of Minnesota; Dr. E. E. Lewis, professor of school administration, Ohio State University; C. W. Atkins, director, governmental research institute, St. Louis; Prof. N. B. Henry, University of Chicago, and Prof. E. S. Lawler, Northwestern University.

The afternoon will be devoted to a sightseeing tour and supper at Roosevelt High School, with talks by S. D. Shankland, executive secretary, Department of Superintendence; Dr. H. G. Harmon, president, Williams Woods College, Fulton, Mo., and George Womrath, business superintendent, Minneapolis.

The convention will close on Friday with a business session. Monday, Oct. 12, will be given over to visiting, registration and a local program.

ADMINISTRATION

Rating Rural Schools

In an effort to standardize the recognition requirements of rural schools in Illinois, the state department of public instruction has issued Circular No. 289, "Elementary School Standards." The requirements for recognition are here divided into buildings, equipment, the community, the teacher, the course of study and other similar groupings.

The circular is composed of a rating sheet and a manual to be used as a guide. These have been prepared for a one-teacher school only, but may be used as a basis for all elementary schools, since the suggestions as to repair of buildings, purchasing equipment and qualifications of teachers are equally applicable to graded elementary schools.

Several counties are now using this circular, as it was placed in the hands of school board members during the summer. They report that it has been most useful in planning summer repairs and purchasing equipment. Some of the counties claim that by October 1, from 20 to 40 per cent of their schools will have met the recognition requirements. The department of public instruction asks that careful study be given this circular during this first year of its use, with an ultimate revision in mind when an agreement may finally be reached as to just what does constitute a recognized elementary school.

Statistics

Some 14,000 city superintendents, 3,500 county superintendents and 1,018,-000 teachers welcomed back to school this September 33,000,000 pupils, according to the Office of Education.

Into the open school doors came 23,-000,000 elementary school children, 6,000,000 high school pupils and 1,000,-000 college students.

The average city school term for 1936-1937 will be 182 days; the rural school term, 161 days. There are still 138.542 one-room schools.

A total of 77,000 busses are being used to transport 2,794,000 pupils to their school buildings, at an average annual cost of \$20 per pupil.

One-fourth of the nation's teachers are men. Since 1920 there have been 18 per cent more men teachers and only 6 per cent more women teachers in the public elementary schools.

International Differences

That there are three major points of difference in school administration as practiced in Great Britain and the United States is the conclusion of Dr. Theodore L. Reller, assistant professor of education at the University of Pennsylvania, after completing his study of special features of administration in the larger cities of England and Scotland.

The extent to which cooperation is established between local municipal authorities and local educational authorities; the much wider scope of social responsibility placed on the local, educa-

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LARGEST ORGANIZATION OF ITS KIND tional authorities, and the manner in which local initiative is preserved, while the benefits of national aid and professional leadership are secured, contrast greatly with current practices in American schools.

INSTRUCTION

Model One-Room School

At Ivory Hill, Ky., is a rural school so absorbing to its pupils that its attendance is sought by children from surrounding districts. With only thirty-seven children of school age in the community it serves, Ivory Hill School has an average daily attendance of forty-one.

It is in this school that the University of Kentucky is conducting an experiment in rural teacher improvement, an idea advanced by Mrs. Mamie West Scott, county superintendent of schools. Here the university sent Etheleen Daniels, fifth grade teacher in the university's elementary school. It was representative of the unattractive and unkempt type of rural school.

With the aid of the children and of the Sunday School which met in the schoolhouse, Miss Daniels raised a small sum of money for painting the interior of the building. This was supplemented by Mrs. Scott, and the building was completely redecorated. Inexpensive sash curtains were hung at the windows, a home built book case was installed, and the interior was further made livable by carpentry which provided places for hats, lunch baskets and coats.

Each week a group of rural teachers are sent to visit the school and study the methods employed by Miss Daniels. They spend the entire day watching and observing and after the children have been dismissed spend an hour or two, with Miss Daniels as leader, in discussing the problems of the day. The experiment is to last six weeks. The university has also established a radio listening center at the school, which assists in the program work.

Facts to Replace Food Fads

In an effort to present to its pupils the facts of nutrition in their fullest sense, the department of public instruction of Pennsylvania has issued a bulletin, "Nutrition and the School Lunch." Special care has been taken that the material presented will be suitable to the pupil's age and interest. The pamphlet deals with nutrition facts and information; the obligation of the home; the school lunch organization; the school lunch for the small school, and the separate school and cafeteria.

Experiment Discontinued

The junior college operated experimentally in connection with Northeast High School at Kansas City, Mo., since 1930 has been discontinued by the board of education. It was felt that the pupils entered their third year of college at too young an age, a result of permitting the junior and senior high school work and the two-year junior college course all to be completed in a period of three years. This discontinuance has no effect on the regular junior colleges conducted by the board.

School of Tomorrow

Included in the preliminary plans for the World's Fair of 1939 to be held in New York is an exhibit that will be known as "The School of Tomorrow." This will be an industrial project comprising an actual school equipped to produce the finest possible physical environment for education. A teaching staff, carefully selected, will demonstrate the most advanced educational methods. In addition to attracting teachers, principals, supervisors and superintendents of schools as well as boards of education, the School of Tomorrow will be designed to appeal to the public at large. It is proposed that one classroom be set aside for school systems throughout the country to exhibit their outstanding achievements, different cities being asked to select their major activities. Children and teachers will then be transported from these cities for a twoweek period to demonstrate their particular activity. Identified with the preparation of the preliminary plans are Profs. Ned H. Dearborn and Harvey Zorbaugh of New York University.

Acoustics Courses

Many different courses are being planned for this fall by the Columbia School of Architecture, New York City, on the acoustics of building. Studies in noise, sound vibration and other disturbing factors comprise a new schedule of instruction in University Extension. In addition to building acoustics, air conditioning, illumination and structural and decorative materials will be covered in evening courses to be conducted by a teaching staff composed of physicists, architects, engineers and experts from the industries.

Out for Culture

That the trend in adult education is shifting from utilitarian studies to cultural studies is evident in the adult education programs being listed by the universities this fall. During the early stages of this movement, most of the instruction was planned to improve vocational skills and was given outside the

universities. At the present time the shift is toward the promotion of enriched leisure and avocational pursuits.

Ford "School System"

Some 4,400 students attend instruction classes at the Rouge plant of the Ford Motor Company, Dearborn, Mich. About 800 boys have spent three months in the Training School for high school graduates since it was opened in June, 1935. After this course, the student becomes a regular employee and may continue his work in the Apprentice School. A third school, the Henry Ford Trade School, is for boys from twelve to eighteen; 1,700 boys from needy families are enrolled in this four-year school.

FINANCE

City School Costs

The daily cost of one city child's education in the United States ranges all the way from 12 cents in one city to \$1.10 in another, according to a new Office of Education pamphlet on per-pupil school cost. The average yearly cost is \$96.18 per child.

Of this amount, \$74.82 is spent on teachers, supervision, libraries, textbooks and supplies. Operation of plant costs \$9.27. Plant maintenance averages \$3.29. Services of the superintendent, board, business manager, director of compulsory attendance and school census and director of health and guidance services total \$3 per child. The remaining \$5.80 goes for transportation of pupils, rent, insurance, payments to teachers' pension funds, doctors, nurses, dentists, attendance officers and miscellaneous services.

To educate a rural school child the cost is around \$53.31 a year.

Closes in 63d Year

Financial difficulties are responsible for the decision to close the Princeton Preparatory School, founded in 1873 by Princeton University as a preparatory department of the college. The school has been a private institution since 1885 when the college abandoned its preparatory departments. The property consists of two dormitories, recitation building, gymnasium, faculty quarters and athletic field

Free Traffic Officers

The sum of \$5,500 a year is the value placed upon the school boy safety patrol by the city of Rochester, Minn. Basing its figures upon a patrolman's pay, the city estimates that each of the fifty-three boys composing the patrol had



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Library Division

Public and school library service will be fostered by the U. S. Office of Education following a Congressional appropriation of \$25,000 for that purpose in 1936-1937. The new library service division will make surveys, studies and reports on public, school, college, university and other libraries; it will coordinate library service on a national level with other forms of education; it will develop library participation in federal projects; it will foster nationwide coordination of research materials among scholarly libraries, and interstate library cooperation.

"There is a growing demand upon the Office of Education for information and advisory service to libraries corresponding to the service now given to schools," said John W. Studebaker, U. S. commissioner of education. "Libraries are now an essential part of the country's educational equipment. Schools without good libraries administered by trained librarians cannot measure up to modern conceptions or to the demand of modern methods in education. This new library division should be of great service to students, educators, librarians and citizens in general."

When Is Private School Public?

The Bulkeley School, the Chapman Technical High School and the Williams Memorial Institute, all private schools serving New London, Conn., may be taken over by the New London City Council, if the committee recently appointed by it to decide the advisability of such a move, votes in its favor. These schools are approved by the state board of education for the attendance of pupils whose tuition is to be paid from public funds, and are the only schools serving New London. The question of taking them over arose with the necessity of another high school, when it was pointed out that though the council supported the schools, it had no say in their government, which is conducted by boards of trustees.

GIFTS

Wills to Association

The New York State Teachers' Association will receive \$16,518 from the estate of the late Mary J. McKee, retired assistant principal of Public School 11, Richmond, Staten Island, New York, who died last year in Southern Rhodesia. Miss McKee, who was seventy-nine years old at the time of her death, had

been a teacher in the schools of Staten Island for forty-two years. Her entire estate has been appraised at \$87,925.

Collection of Recorded Music

Twelve thousand phonograph records, including songs, oratorios, cantatas, concertos, sonatas, symphonies and operas, have been presented to the University of Pennsylvania's department of music by Mrs. Jacob Singer of Philadelphia, in memory of her son, Dr. Godfrey F. Singer, who was an assistant instructor in English at the university.

COURT CASES

Cafeteria Income Tax

The decision of a lower court, whereby it was sought to make the income of one Mrs. Hoskins, a school cafeteria manager, taxable, was reversed by the United States Circuit Court of Appeals for the Fifth District, at New Orleans.

Undoubtedly, said the court, Mrs. Hoskins is an employee of the school board and not an independent contractor. It was within the discretion of the school board to determine what was essential in the operation of the schools. The cafeteria system as operated by the school board cannot reasonably be considered a private enterprise, equivalent to a public cafeteria operated for profit. That its receipts are kept separate does not make it a separate entity and is no more than a matter of bookkeeping, for convenience in determining whether it shows a loss or is even as intended. The cafeteria no doubt tends to improve the health of the pupils. Surely this is a result within the province of the school board to accomplish. Perhaps the introduction of a balanced meal gives some instruction in dietetics. To that extent. at least, it is educational.

"We consider that the operation of the cafeteria system was a proper exercise of government function by the school district and that Mrs. Hoskins is a public employee of a political subdivision of the state of Texas engaged in performing governmental functions."

The business manager of the Fort Worth, Tex., schools, Edward P. Williams, at whose instigation the test case was pursued, stated the importance of the decision as being "not so much its effect upon the individual employees of the cafeteria system, few of whom receive in excess of the deduction allowed by the federal income tax laws, but upon the public school system, itself, which operates the cafeteria systems, for had the decision of the circuit court been otherwise, then all cafeteria systems throughout the United States

would be required to file income tax returns covering their cafeteria operations and where any profit is made to pay the regular corporation tax."

District Difficulties in Maine

Dragging through the Maine courts is a test case to decide whether or not the school district of Brunswick is legal. Meanwhile the town has voted four times for a high school to be erected, the government has allocated PWA funds for its erection, and the necessity for the school has become more pressing through the burning down of the Center Street School. When schools reopened, it was necessary to place the pupils of Center Street School in the present crowded high school building, since no provision to replace that school has been made, under the circumstances. This has resulted in high school periods being cut to thirty-five minutes, ten minutes less than demanded by the state board.

No Admission

For the first time in its close to 100 years of existence, a Negro student has sought admission to the University of Missouri. Last March Lloyd L. Gaines, a Negro graduate of Lincoln University, sought admission to the University of Missouri school of law. He was denied admission by the board of curators and then filed a mandamus suit against the school. The circuit court judge ruled that he could not be admitted to the university. The state universities of four adjoining states, Kansas, Nebraska, Iowa and Illinois, all admit Negro students.

BUILDINGS

Borrowed Modernization

Nearly a half-million dollars in insured credit has been obtained by schools and colleges in the United States for modernization programs. Under the FHA, 454 of these institutions, which lack sufficient endowments to permit them to carry through such programs without aid, have borrowed \$477,767 from private financial institutions for the modernization and repair of their buildings, and purchase of equipment.

For Cardiacs and Crippled

Facilities for the care of crippled children and cardiac cases are to be provided in the new Public School 68 to be erected in Harlem, New York City. The building, as its plans now stand, will be an adaptation of the Tudor style, containing forty classrooms. An indoor playroom, kindergarten, classrooms for cardiac sufferers, library, music room,



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lunchroom, kitchen, medical room and dental clinic, a large gymnasium, a roof playground, and special classrooms and exercise rooms for crippled pupils are included in the plans.

Less 8,000 Tons

Improvements in the heating plant at the University of Michigan reduced coal consumption from 45,000 tons in 1929-1930 to 37,000 tons in 1934-1935, despite a large increase in building cubage to be heated.

Aids to Digestion

The dining room, commissary and kitchens at Lake Forest Academy, Lake Forest, Ill., have been reconditioned for the opening of school. Venetian blinds have been hung at all the dining room windows, the walls of that room have been newly paneled, and new lighting fixtures and chairs have been installed. The ceilings have been acoustically treated and the floors have been covered with asphalt tile.

Refuses to Burn

A fireproof roof on the top of the small stucco building which houses the manual training department of the school at Westfield, Iowa, was responsible for saving that building when the rest of the two-story schoolhouse went up in flames. Erected and equipped in 1915 at a cost of \$25,000, only \$10,000 worth of insurance was being carried on the building at the time it burned. Forty-eight tons of coal, which had just been stored in the school basement, were partially consumed in the flames.

Hunger

Aroused by authenticated reports of social service workers regarding conditions of hunger, cold and lack of the most ordinary requisites of civilization among the children of West End, Tenn., the citizens of Trenton, Tenn., have taken the first step toward alleviating these conditions through the erection of a schoolhouse at West End. Some thirty children, some of them as old as fourteen, have never been to school. The county will furnish heat, lighting, bathroom and cooking facilities for the school. One hot meal a day will be served to the children during the school week

Girls' Dormitory

A new dormitory for women is being erected at Wheaton College, Wheaton, Ill., which will solve in part its housing problem. That section now under construction will form the major portion of a building which when completed will have an additional section at each end providing a total capacity of 150 stu-

dents. The sum involved in the present building program is approximately \$70,000, which includes furnishings.

City College Lab

Approval has been received under WPA auspices for a four-story addition to the chemistry building at the main center of City College, New York City. Eight chemical laboratories will be made available when the work is completed, and offices for professors and rest rooms will be installed on each floor. Special quarters are planned for the chief engineer of the college and pipe storage space will be provided in the sub-basement. The cost of the addition is estimated at \$75,000 and construction will begin as soon as several other WPA projects about the college are completed and the necessary workmen and machinery are available.

ANNIVERSARIES

Education Week

American Education Week will be observed from November 9 to 13, with "Our American Schools at Work" as the point of emphasis. The outline as suggested by the committee in charge of the week, provides the following themes for each day: Monday, "The Story of the Schools"; Tuesday, "The Changing Curriculum"; Wednesday, "New Services to the Community"; Thursday, "The Unfinished Business of Education"; Friday, "Financing America's Schools"; Saturday, "Education for Physical Fitness," and Sunday, "Education for Character."

Celebrates Centennial

The first municipal university founded in America will this year celebrate its centennial. The University of Louisville, founded on April 3, 1837, has planned a series of events that began with its opening on September 10, and will carry through the year culminating in a Founders' Day program on April 3 and commencement on June 8.

At Harvard

To Al-Azhar University of Cairo, founded in 940, went the honor of being the first called at the formal academic reception which took place at Harvard September 16 in connection with the tercentenary celebration. Prof. Saleh Hashem Attia responded.

Next came the Regia University, Negli Stuni Bologna, founded in the tenth century and represented by Prof. Corrado Gini. Prof. Elie Cartan bowed for the University of Paris, third oldest. Oxford, fourth, had four representatives, including Vice Chancellor Alexander Dunlop Lindsay; Cambridge, fifth, sent five delegates.

Ten Nobel prize winners attended the reception, along with other world famed educators and scientists. Forty countries and 502 universities were represented. Newest was the Academia Sinica of Nanking, whose delegate was Prof. Hu Shih.

RADIO

New Broadcasts for Old

When the American School of the Air starts its broadcasts on October 13, it will bring to its listeners two utterly new features, one for Tuesday and one for Thursday. The Tuesday innovation will be the performance of compositions written by historical figures, many of which have never been performed in America previously.

Madrigals and songs of Henry VI, Henry VIII, Charles I and Charles II of England; the songs of Pepys, Milton, Villon; the orchestral music of Rousseau, Butler, Nietzsche and Benjamin Franklin; the choral works of Prince Lorenzo d'Medici, and excerpts from the operas of E. T. Hoffmann and Philidor, are among the rare works planned for production this fall.

The Thursday program will not start until the last half of the year. It will be composed of a series of broadcasts from foreign countries in which the soloists, choruses and choirs of Ireland, France, Spain, Italy, Germany, Holland, Czechoslovakia, Sweden, Austria, Scotland and Denmark will offer typical native folk music for their American listeners. Each of these programs will be concluded with a talk given by a child from the country represented. The talks will be translated into English.

To Continue Broadcasts

The monthly radio programs of the Iowa State Department of Public Instruction will again be broadcast this year over Station WOI at Ames, through the courtesy of that station and of the department of vocational education of Iowa State College. The programs are given on the third Saturday of each month.

For Math Teachers

A Saturday morning radio course in the teaching of mathematics is being offered this autumn by the school of education, University of Michigan, in cooperation with the extension division. The course will be presented by Prof. Raleigh Schorling and will combine instruction by radio with correspondence work.

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PERSONNEL

Bans Married Teachers

No married women will be employed in the schools of Davenport, Ia., as a result of a resolution recently adopted by the school board. This will have no effect upon the sixteen married women already employed for the coming year.

Wholesale Resignations

In a concentrated movement that broke all previous records of the Pennsylvania school employees' retirement board of the department of public instruction, 300 teachers filed applications for retirement during one month. Of the total number retiring, 153 had been connected with the schools from fifty to fifty-five years. Practically every county in the state is represented among the 300, with Philadelphia County leading with fifty-eight, Allegheny County second, with forty, and Dauphin County third, with nineteen. The average age of the teachers filing these applications is sixty-five.

94 Per Cent Success

Of the fifty-eight graduates from the department of elementary education of the University of Kentucky in the June and August classes, all but three have been placed in teaching positions, and from present indications, these three will be placed shortly, according to Mrs. May K. Duncan, head of the department.

VISUAL EDUCATION

Fifty Years of Psychology

The first fifty years of the teaching of psychology at Colgate University has been marked by the completion and showing of a costume motion picture film giving the history of the school and the department since 1886. The film was made by Dr. Donald A. Laird, director of the department of psychology, and re-creates Dr. Newton Lloyd Andrews and the seventeen members of the first class in psychology, through the use of stills.

Most of the one-hour picture is in color, and contrast is employed throughout, such as a shot of the three original buildings of the school and an airplane view of the present university; the heavily mustached members of the first class, and the clean shaven class of 1936, at ease in its comfortable classroom with its stained glass windows, relic of its original chapel days. The romance of horse and buggy days is represented by

the visit of a Syracuse coed in 1885, and the traditions of the school by the burial of a class hatchet.

Colgate is said to be the only school in the world where students of psychology study the brain, spinal cord, autonomic nerves and endocrine glands from human cadavers. Ten per cent of the school's upper classmen are majoring in psychology.

Filming the Primitives

Motion picture studies of alien and primitive peoples have been made available to schools by the Harmon Foundation, New York City, through the Religious Motion Picture Foundation. Among the studies is a series on the American Indian, China, Japan and Puerto Rico, dealing with their historical, social and geographic backgrounds, their problems and their relationships to this country. Brief teaching guides are

supplied with each film and all prints are 16 mm., noninflammable and silent. The entire series is composed of twenty-one reels. Rental prices are \$1.50 per day for one-reel subjects, \$2.50 per day for two-reel subjects and \$3 per day for three-reel. An additional charge of 50 per cent of the first day's rate is made for each additional day's use.

Geography by Boat

Motion pictures to be used in teaching geography will be made by a small expedition which recently sailed from England on a yacht. The leader of the group, John C. Elder, has done much work in the field of educational films and has been instrumental in establishing a film library in Glasgow, Scotland. The chief cameraman will be J. Blake Dalrymple, joint owner of the yacht. The expedition plans to encircle the globe and to be gone three or four years.

Films for the School Screen

XIV — Mexico

Our Mexican Neighbors—A quick study of the country, its peoples and its cultures. 2 reels. 16 mm., silent. Rental price, \$2. The Religious Motion Picture Foundation, 140 Nassau Street, New York City.

Mexico's Magic—A one-reel feature film. 16 mm., silent. Transportation charges only. Publicity Department, Grace Line, 30 Rockefeller Plaza, New York City.

Mexico—Scenes taken all the way from moss - covered pyramids to snow-crowned mountain tops show native life and activities, and illustrate latent possibilities as well as the progress of this country, which has been termed a "stile between waters." 1 reel. 16 mm., silent. For rent or purchase. Teaching Films Division, Eastman Kodak Company, Rochester, N. Y.

Thunder Over Mexico—Produced under the direction of Sergei Eisenstein. A strikingly beautiful portrayal of the struggle of the Mexican people. Highly praised for its photographic splendor. Musical score by Hugo Reisefeld, with English titles. 7 reels. 16 mm., sound. For rent or purchase. Garrison Film Distributors, Inc., 729 Seventh Avenue, New York City.

Mexico—The Land That No One Knows—Produced by Emma Lindsay Squier, writer, and John Bransby, cameraman. Three episodes of two reels each. Reels 1 and 2—Modern Mexico, showing pyramids and relics of old civilization underneath the modern city, labor holidays, Deigo Rivera painting murals, dances, fiesta costumes, floating gardens. Reels 3 and 4—Mexico of Yesterday, showing

Guanajuato, a mountain city with old churches and customs; sacred city of Yucatan. Reels 5 and 6—Land of chewing gum, the Outlands. 16 mm., sound. For rent or purchase. Garrison Film Distributors, Inc., 729 Seventh Avenue, New York City.

Mexico—A study in three parts of Mexico as a nation: early history; first years of independence; the country of today. 2 reels. 16 mm., silent. Edited Pictures System, Inc., 330 West 42nd Street, New York City.

Through the Oil Fields of Mexico—Made in cooperation with the American Oil Company. General views around fields, spouters, gas-absorption plants, pump stations, oil shipment, scenic surroundings, including some of the famous mountains, street scenes and native life. 3 reels. 35 mm., silent. Transportation charges only. U. S. Bureau of Mines, Experiment Station, 4800 Forbes Street, Pittsburgh.

Land of Montezuma—A contrast between the Mexico of today and days of the conquistadores. 1 reel. 16 mm., sound. For rent or purchase. International Educational Pictures, Inc., 40 Mount Vernon Street, Boston.

City of Mexico—Scenes in and around Mexico City; transportation, buildings, etc. 1 reel. 16 mm., silent. For rent. Visual Instruction Service, Iowa State College, Ames, Iowa.

In the Wilds of Mexico—Mazatlán, beautiful seaport; mango swamps; Mexican village; pearling fleet. 1 reel. 16 mm., sound. For rent or purchase. Hollywood Film Enterprises, Inc., 6060 Sunset Blvd., Hollywood, Calif.







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NAMES IN NEWS

City Superintendents

PAUL S. AMIDON, deputy state commissioner of education for Minnesota, has been appointed superintendent of schools at St. Paul, where he succeeds Dr. S. O. HARTWELL, who has been superintendent for eighteen years.

VIERLING KERSEY, state superintendent of public instruction for California, has been named superintendent of Los Angeles schools for a four-year term. He will take office on February 1, when the resignation of FRANK BOUELLE becomes effective.

JORDAN L. LARSON, superintendent of schools at Grundy Center, Iowa, for five years, has been appointed superintendent of schools at Ames to succeed M. G. Davis, who has been made superintendent of schools at Lake Forest, Ill.

HENRY M. BRUSH, school superintendent in the fifth supervisory district of Steuben, N. Y., since 1912, was recently reelected to serve in that capacity for five more years.

STANLEY MOORE, who graduated just a year ago from Western State College of Colorado, has been appointed superintendent of schools at Dolores, Colo.

R. D. THOMAS, former Brantley County superintendent of schools, has been appointed superintendent of Nahunta High School, Nahunta, Ga.

CHARLES PRIEST, who has completed his tenth year as superintendent of schools, Carson City, Nev., has been reelected for a four-year term. Previous to his present position he was deputy state superintendent of public instruction of Nevada for seven years.

R. E. RENNE, former principal at Dundee, Ore., has been elected city school superintendent of Newberg, Ore.

C. D. HOLLISTER, superintendent of Roseau public schools, Roseau, Minn., has been reelected for his seventh consecutive year.

City Assistants

GUSTAV L. GRAEF, assistant superintendent of school supplies for New York City, has been appointed superintendent of school supplies to succeed PATRICK Jones, who retired recently.

IRVIN H. SCHMITT, superintendent of schools at Sac City, Iowa, for eight years, has been appointed assistant superintendent of schools at Davenport.

DR. JAMES F. BURSCH, director of personnel of the Sacramento, Calif., school system, has been appointed assistant superintendent of schools to succeed JESSE R. OVERTURF.

REGINA C. M. BURKE, principal of Public School No. 39, the Bronx, New

York City, has been appointed assistant superintendent of schools to succeed Frank Hankinson, who retired.

ALEXANDER S. SONNTAG, head of the mathematics department of the Warren Easton High School, has been appointed assistant superintendent of schools at New Orleans in charge of special classes and Negro schools.

Private School Personnel

LAMBERT F. WHETSTONE, assistant headmaster of the Episcopal Academy, Philadelphia, for seven years, has been appointed headmaster of the Grosse Pointe Country Day School, Grosse Pointe Farms, Mich.

RUFUS A. PALM, superintendent of schools at Lordsburg, N. M., has been appointed headmaster of the Pacific Military Academy, Culver City, Calif.

He will be succeeded at Lordsburg by J. CLOYD MILLER, principal of the high school at Carlsbad, N. M. .

State Appointments

Dr. James A. Newpher has been appointed director of the bureau of professional licensing in the Pennsylvania Department of Public Instruction to succeed Dr. CLARENCE E. ACKLEY, who has been transferred to the post of director of the bureau of administration and finance. Doctor Newpher has been professor of education and psychology at Geneva College since 1925.

J. S. CHAMPION, advisor in the division of agricultural education in the department of public instruction in Pennsylvania, has been appointed senior county vocational educational advisor at Allegheny County.

On the Air During October

The following programs of particular interest to school people are arranged by the National Broadcasting Company, the Columbia Broadcasting System and the Mutual Broadcasting System. The time is Eastern Standard Time.

National Farm and Home Hour¹—12:30-1:30 p.m. (NBC-WJZ). Wilderness Road—4:45-5:00 p.m. (CBS).²

Monday

History Series—2:15-2:45 p.m. (CBS).
Oct. 19—Santa Fe.
Oct. 26—Hartford.
Children's Songs, Stories and Novelties, Dorothy Gordon—4:15-4:30 p.m. (CBS-WABC).
Safety Musketeers, talk, music and dramatization, U. S. Office of Education—4:00-4:15 p.m. (CBS).
Education-in-the-News, U. S. Office of Education—7:45-8:00 p.m. (NBC-WEAF).

Music of Famous Men and Women Series—
2:15-2:45 p.m. (CBS).
Oct. 13—Frederick the Great of Prussia.
Oct. 27—Henry VII.
Literature Series—2:15-2:45 p.m. (CBS).
Oct. 20—Poetry appreciation.
Have You Heard? (Introductions to fascinating corners of natural science) U. S. Office of Education—3:45-4:00 p.m. (NBC-WJZ).
Science Service Series, Watson Davis, Editor—2:15-2:30 p.m. (CBS).
Medical Emergencies and How They Are Met, dramatized program, American Medical Association—5:00-5:30 p.m. (NBC-WEAF).
Oct. 13—What to Do for Blind Children, Dr. W. W. Bauer, director, bureau of health and public instruction, American Medical Association.
Oct. 20—Arthritis, Dr. Morris Fishbein, editor, Journal of the American Medical Association and of Hygeia.
Oct. 27—Health for the Deafened, Dr. W. W. Bauer.

ews of Youth, junior news dramatization—5:15-5:30 p.m. (CBS).

Wednesday

Growth and Development of the Child, National Congress of Parents and Teachers in cooperation with the American Academy of Pediatrics—2:30-3:00 p.m. (NBC-WEAF).
Oct. 21—What Is Growth, Lawrence K. Frank, associate director of education, General Education Board.
Oct. 28—Prenatal Growth, George L. Streeter, director, department of embryology, Carnegie Institution of Washington.
Geography Series—2:15-2:45 p.m. (CBS).
Oct. 14—Gibraltar (Intermediate).

Oct. 21—Auvergne Region of France. Oct. 28—Scotch Highlands. Cavalcade of America, dramatization of sig-nificant moments in American History— 8:00-8:30 p.m. (CBS).

Thursday

Academy of Medicine—2:30-2:45 p.m. (CBS).
Music, Literature and Science Series—2:152:45 p.m. (CBS).
Oct. 15—An Experiment With Carbon Dioxide (Intermediate), and Dorothy Gordon (Primary, music).
Oct. 22—The Origin of Fire (Intermediate), and Dorothy Gordon (Primary, music).
Oct. 29—What Is Air Pressure (Intermediate), and Dorothy Gordon (Primary, music).

Friday

Music Appreciation Hour, under the direction of Walter Damrosch. Series A and C, 2:00-2:30 p.m., alternating weekly: Series B and D, 2:30-3:00 p.m., alternating weekly. (NBC-WEAF, WJZ).

Vocational Guidance and Current Events Series —2:15-2:45 p.m. (CBS).
Oct. 16—Is It Possible to Have a Job for Every Person, and Current Events.
Oct. 23—Thousands of Different Occupations, and Current Events.
Oct. 30—Do Machines Reduce the Number of Jobs, and Current Events.
General Federation of Women's Clubs Series—2:45-3:00 p.m. (NBC-WJZ).

Saturday

Magic of Speech-11:30-12:30 p.m. (NBC-WEAF).

Sunday

Sunday

Beethoven Sonatos, violin and 'cello, Berezowski and Bay—10:30-11:00 a.m. (CBS).

The World Is Yours, Smithsonian program—11:30 a.m.-12:00 m. (NBC-WJZ).

University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).

Titans of Science—7:00-7:15 p.m. (MBS).

Ford Sunday Evening Hour, Fritz Reiner, conductor—9:00-10:00 p.m. (CBS).

General Motors Concerts, Erno Rapee, conductor—10:00-11:00 p.m. (NBC-WEAF).

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Resignations

JOHN R. WILKINSON, dean of Niagara University, Rochester extension division, resigned because of ill health.

LAMONT F. HODGE, superintendent of schools at Yonkers, N. Y., has submitted his resignation from that position, one he has held for fourteen years. He has been connected with the Yonkers school system for twenty-five years, the first eleven of which he was assistant superintendent.

County Changes

MRS. ETHEL S. WARD, general rural supervisor of schools at Santa Cruz County, California, has been appointed deputy school superintendent of Alameda County.

EUGENE S. TETER, supervising principal of senior and junior high schools at West Hazleton, Pa., has been appointed assistant county superintendent of schools of Luzerne, County, Pennsylvania, to succeed HARVEY HOFFMAN, who resigned because of ill health.

DR. CLYDE EVERETT WILDMAN, professor of Old Testament history and religion at Boston University, has been elected president of De Pauw University, succeeding Dr. G. Bromley Ox-

E. S. RICHARDSON, superintendent of schools at Webster Parish, La., for sixteen years, has been elected president of Louisiana Polytechnic Institute, succeeding G. W. BOND.

College Departments

DR. HENRY L. FULMER, formerly director of the division of research and information of the state department of education, South Carolina, has been appointed head of the department and research professor of education of the newly established department of rural educational research at Clemson Agricultural College.

FREDERICK ARCHER, superintendent of schools at Louisville, Ky., has been appointed professor of education in the extension division of the University of Alabama. He will fill the vacancy left by the resignation of Dr. Clarence M. DANNELLEY, who is now superintendent of Montgomery city and county schools.

DR. CHARLES E. KENNEY, former principal of Neville High School, Monroe, La., has been appointed head of the teachers' training department at Southeastern Louisiana College, Hammond,

FLETCHER HARPER SWIFT, professor in the school of education, University of California, has been created a Chevalier of the Legion of Honor by the French government, in recognition of the service he rendered the republic through his recently published monograph, "Policies of Financing Institutions of Public Instruction in France."

Appointed

JESSE B. SEARS, professor in the school of education, Stanford University, has been appointed to the staff of the Educational Policies Commission for the autumn quarter of 1936. Doctor Sears has been granted a leave of absence from Stanford to accept this appointment, which involves the drafting of a comprehensive plan for studying the effect of the depression on schools and other educational agencies.

Dr. Max Mason, one-time president of the University of Chicago, and since 1930 president of the Rockefeller Foundation, from which he is retiring, has been appointed a staff member of the California Institute of Technology.

1

Published

DR. ERIK McKINLEY ERIKSSON, professor of history at the University of Southern California, and TRENT H. STEELE, social science instructor at Montebello High School, Montebello, Calif., have just published a 100-page book, "Constitutional Basis for Judging the New Deal."

Deaths

DR. WILLIAM R. STRAUGHN, president of Mansfield State Teachers College, Pennsylvania, died at Crile Clinic, Cleveland, following an operation.

H. A. FANKHAUSER, superintendent of schools at Shreve, Va., for eight years, died of a heart attack while driving home from school. He was found dead in his car after it crashed into a telephone pole in the center of Shreve's business district.

RALPH B. RUBINS, superintendent of schools at Bristol, Tenn., died at Ocean View, Va., of a heart attack, while vacationing. Mr. Rubins, who was fifty-five years old, had been Bristol's superintendent for more than twenty-two years.

RALPH BURGESS DOUGHTY, principal of the Ferndale Union High School, Ferndale, Calif., died from a cerebral hemorrhage. Mr. Doughty, who was thirty-nine years old, had just been reelected to his position for the sixth year.

Coming Meetings

Oct. 2-3—Conference of Food Service Directors, Hotel Commodore, New York rectors, Hotel Commodore, New York City. Oct. 7-8—Pennsylvania's Annual Education

Congress, Harrisburg.
Oct. 7-9—New Hampshire State Teachers
Association, Littleton. Oct. 8-9-New Hampshire State Teachers' Association, Littleton.

Oct. 8-10—Vermont State Teachers Association, Burlington.
Oct. 12-16—National Association of Public School Business Officials, St. Louis.

et. 15-17—Wyoming Education Associa-tion, Laramie.

Oct. 22-28—Indiana State Teachers' Association. Indianapolis.
Oct. 22-24—Mississippi Education Association, Jackson.
Oct. 22-24—Rhode Island Institute of Instruction, Providence.

Oct. 23-24-Maryland State Teachers' As-

ciation, Baltimore, 29-30—Maine Teachers' Association, Lewiston.

Oct. 29-31—Montana Education Associa-tion, simultaneous meetings at Helena, Kalispell, Great Falls and Billings. 29-31-Utah Education Association.

Salt Lake City 30-Connecticut State Teachers Association. Hartford.

Oct. 30-31-Kentucky Association of Colleges and Secondary Schools, Lexington. ov. 4-6-North Dakota Education Association, Grand Forks.

Nov. 5-7—Colorado Education Association, simultaneous meetings at Denver, Pueblo and Grand Junction.

Nov. 5-7-Iowa State Teachers Association, Des Moines.

Nov. 5-7—Minnesota Education Association, St. Paul.

St. Paul.

ov. 6-7—Kansas State Teachers Association, simultaneous meetings at Topeks,
Salina, Hays, Garden City, Hutchinson,
Winfield, Coffeyville and Fort Scott.

ov. 9, week of—Delaware State Education Association, Wilmington.

Nov. 11-14-Missouri State Teachers Association, Kansas City.

Nov. 12-14—Arizona State Education Association, Tucson.

Nov. 12-14—West Virginia State Education Association, Huntington. Nov. 13-16—New Jersey State Teachers' Association, Atlantic City.

Nov. 16-18—Association of Land-Grant Colleges and Universities, Washington, D. C.

Nov. 19-20—Illinois City Superintendents' Association, Springfield.

Nov. 19-21-Louisiana Teachers Association,

Nov. 22-25—South Dakota Education Association, Rapid City. Nov. 26-28—Texas State Teachers Association, Fort Worth.

Dec. 2-5—American Vocational Association, New York City.

Dec. 10-12—National Conference on Educational Broadcasting, Washington, D. C.

Dec. 28-30—Pennsylvania State Teachers Association, Harrisburg. Jan. 18—National Committee on Education by Radio, New York City.

Feb. 20-25—Department of Superintendence, National Education Association, New Or-

leans. eb. 20-25—American Physical Education Associatión, New York City.

Feb. 25-27—Progressive Education Association, St. Louis.

Feb. 26-27—American Association of Junior Colleges, Dallas, Tex.

Feb. 27-National Advisory Council on School Building Problems, New Orleans. Council on April 7-10-North Central Association of Colleges and Secondary Schools, Chicago,

April 21-24—American Physical Education Association, New York City. May 7-8—American Council on Education, Washington, D. C.

June 27-July 1-National Education Association, Detroit.

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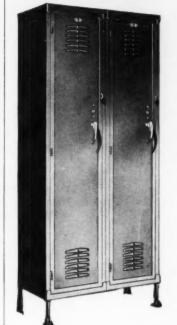
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Miss Liberty will be fifty on October 28. Nationally commemorated will be the golden anniversary of the dedication of Bartholdi's giant statue of

Liberty, gift of the French people, on Bedloe's Island in New York Harbor.

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NOTES FOR BUYERS ...

Sound Sense

Sound out a superintendent on the subject of sound distribution, and what do you get? Sound facts? Mr. Lowdermilk (pages 51-53) did some plain and fancy sounding, only to find that some of the wisest school administrators were pretty shallow when it came to the technical field of radio.

We like Mr. Lowdermilk's suggestion that school executives familiarize themselves to some extent with the limitations and possibilities of the radio equipment that is on the market. All good manufacturers welcome consultation. Among these is the Operadio Manufacturing Company, St. Charles, Ill., which is simply bursting to tell all the "plus" features of its new Du Kane and St. Charles models, the former for complete big school installation and the latter for the average sized or small school.

Painting the Town

Perhaps, being a school administrator, you have never painted the town red. Well, there are other colors. You can first wash its blues away and then strike it pink — still, the citizens won't like that. You can blacken it and stripe it with yellow — no, that's worse than it deserves. You can whitewash it, of course — but aren't you a bit tired of doing that?

Perhaps you had better let the town alone and simply confine yourself to your own school system. I'll warn you, though, it will be hard. You know how it is, with a paint brush in your hand—the temptation is to paint simply everything.

If you have never had the urge to paint up the town, just wait until you have tried Texolite. There's a paint! It's made of casein, and here's what it can do, according to the U. S. Gypsum Company, 300 West Adams Street, Chicago: (1) It hides in one coat; (2) it dries in an hour; (3) it goes 25 per cent farther; (4) it leaves no brush marks; (5) it leaves no paint odors; (6) it does not yellow, and (7) one gallon grows into one and one-half gallons of ready-to-use paint.

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You can turn your projector for sound motion pictures into a public address system if you like. You need only \$95, a bagatelle, everything considered. Of course there's a catch in it for some schools. The offer holds good only if you already have the 24B sound-on-film projector made by the Victor Animatograph Corporation, Davenport, Iowa. Lots of well equipped schools do have these projectors; others that are planning to buy a sound projector will now decide upon a 24B animatophone complete with the public address system.

The way it works is this: A small pre-amplifier and a velocity ribbon microphone are built, free of charge, Gentlemen, into the base of your animatophone amplifier. And there's your P. A., just as easy as that.

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At Yale University is the world's largest building devoted solely to physical education, the Payne Whitney Gymnasium. John Russell Pope designed it. A special type of Fairhurst patent folding wall, known as the Unitfold, was the only partition that could fit the conditions existing in this mammoth gym. Although there are twelve units in all, and each has a door 3 inches thick, the entire partition is folded into a space only 20 inches deep. Honest!

Any school building—it need not be immense—in which flexibility of space is desirable, will find highly satisfactory the Unitfold wall, manufactured by the American Car and Foundry Company, 30 Church Street, New York City.

Food Fallacies

Try to get your grandmother to eat food left standing in an open can. She's not ready to die yet a while, not by a jugful

It still keeps bobbing up — the statement that food must be removed from an open can immediately. So does the old theory of "ptomaines." Science, of course, has thoroughly discredited both.

School cafeteria managers know that food may safely be left in the cans if it is kept cool and covered. They know too that commercially canned foods are heat processed to prevent bacterial spoilage and to protect against botulism. They and the classroom teachers owe it to the present generation to break down these old wives' tales. Of help to them will be two booklets—"The Canned Food Handbook" and "What's in a Can of Fruits, Vegetables, Fish?" both sent free on request by the American Can Company, 230 Park Ave., New York.

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A Manual of Walking. By Elon Jessup. Illustrated by Charles E. Cartright. New York: E. P. Dutton and Company, Inc., 1936. Pp. 156. \$1.75.

Until we read this little book we thought that the automobile had discouraged walking. We're wrong. It's still the king of all exercise. Styles, values, methods and results carefully told in an hour's reading.

Noah Webster, Schoolmaster to America. By Harry R. Warfel. New York: The Macmillan Company, 1936. Pp. xiii+460. \$3.50.

Ever since Henry Ford conferred sainthood upon McGuffey by taking him into his sentimentalized one-room school projects, many have lost sight of one who contributed greater depth and possibly more lasting value—Noah Webster. Father of the first American dictionary, author of the famous blue-backed speller and teacher extraordinary, this sympathetic biography fills a long vacant niche in the history of education.

ADULT EDUCATION. By Lyman Bryson. New York: American Book Company, 1936. Pp. v+208. \$2.

Well written analysis of the important problem of adult education now before us. The treatment is conservative and sane, opening a new vista and showing some possibilities. It does not attempt in any sense to offer a panacea either in content or in organization. Strongly recommended for professional reading.

FIFTY-FIVE MEN. The Story of the American Constitution. By Fred Rodell. New York: The Telegraph Press, 1936. Pp. 277. \$2.50.

Straightforward and simple account of the type of government the framers of the constitution planned—and the unexpected results. A study of motives and programs taken almost entirely from Madison's diaries. Excellent for collateral reading in social studies in the upper secondary schools.

A HANDBOOK OF PRIVATE SCHOOLS FOR AMERICAN BOYS AND GIRLS. By Porter Sargent. Twentieth Edition. Illustrated. Boston: Porter Sargent, 1936. Pp. 1,152. \$6.

Invaluable source book of information to all those interested in private education. In addition to a critical listing of private schools unusual information and editorial opinion are offered on every subject from textbooks to fascism. Every high school library should possess this standard reference book to answer parents' queries.

THE STORY OF INSTRUCTION: THE BEGINNINGS. By Ernest Carroll Moore. New York: The Macmillan Company, 1936. Ph 380 \$3

Departing radically from conventional treatments of educational history is this new book on the beginnings of instruction. Contrasting pictures of the extremes of the Greek world—Sparta and Athens—consciously tie the historical implications to current problems. The fundamental problems of democracy and tyranny, ever present and vital, live again in these pages. It is an unusual treatment well worth serious attention not only in the classroom but also by administrators. Under the Axe of Fascism. By Gaetano Salvenini. New

York: The Viking Press, 1936. Pp. xiv+402. \$3. This book might well be titled "Debunking Fascist Propa-

This book might well be titled "Debunking Fascist Propaganda." Written by an able Italian historian who was forced to allow others to "keep the home fires burning," it is a well documented, dispassionate appraisal of fascist claims and actual practices. The people struggle silently—as yet—beneath an almost insupportable oligarchy. Most vivid factual picture of real Italian conditions yet disclosed. Between the lines one may read of the growing disillusionment of big business in the net prepared for others.

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THE EVALUATION OF HIGHER INSTITUTIONS. IV. THE LIBRARY.

By Douglas Waples and Others. Chicago: The University of
Chicago Press. 1936. Pp. xvii+86. \$1.50.

An appraisal of library service in certain tooperating institutions of higher learning.

Just Off the Press

GHOSTS AND GOBLINS. Selected by Wilhelmina Harper. Illustrated by Wilfred Jones. New York: E. P. Dutton & Co., 1936. \$2.

Adventures in Recreation. By Weaver Weddell Pangburn.

Prepared for National Recreation Association. New York:

A. S. Barnes and Company, Inc., 1936. Pp. 138. \$0.72.

Science Interests. By Frederick Linder Fitzpatrick. New York: Bureau of Publications, Teachers College, Columbia University, 1936. Pp. vi+72. \$0.80. (Paper cover)

FIVE MODERN PLAYS: THE DREAMY KID, by Eugene O'Neill; THE FAREWELL SUPPER, by Arthur Schnitzler; THE LOST SILK HAT, by Lord Dunsany; THE SISTERS' TRAGEDY, by Richard Hughes; THE INTRUDER, by Maurice Maeterlinck. Boston: International Pocket Library Corp, 1936. Pp. 96. \$0.25. (Paper cover)

DICTIONARY OF THE FRENCH AND ENGLISH LANGUAGES. With Phonetic Transcription of Every French Vocabulary Word. By J. O. Kettridge. New York: Charles Scribner's Sons, 1936. Pp. xiv+526. \$1.50.

COMMON SENSE IN DRIVING YOUR CAR. By Richard Alexander Douglas. New York: Longmans, Green and Com-

pany, 1936. Pp. 63. \$0.36.

THE TEACHING OF HISTORY IN ENGLISH SCHOOLS. By Olive
E. Shropshire. Teachers College, Columbia University,
Contributions to Education, No. 671. New York: Bureau
of Publications, Teachers College, Columbia University,

1936. Pp. viii + 189. \$2.10.

PROCEDURES USED IN SELECTING SCHOOL BOOKS. By Gertrude Whipple. Chicago: The University of Chicago Press, 1936. Pp. viii+175. \$1.50. (Paper cover)

THE TEACHING OF MATHEMATICS. A Source Book and Guide.
By Raleigh Schorling. Ann Arbor, Mich.: The Ann Arbor
Press, 1936. Pp. viii+247. \$1.60. (Paper cover)

EXPERIENCES IN THOUGHT AND EXPRESSION. By Howard Francis Seely. New York: Silver Burdett Company, 1936. Pp. xvi+512. \$1.48.

BASIC ENGLISH GRAMMAR. By G. David Houston. New York: Globe Book Company, 1936. Pp. viii+290. \$1.32.

A COMPARATIVE STUDY OF UNDERGRADUATE WOMEN MAJORS AND NON-MAJORS IN PHYSICAL EDUCATION WITH RESPECT TO CERTAIN PERSONAL TRAITS. By Anne Schley Duggan. Teachers College, Columbia University, Contributions to Education, No. 682. New York: Bureau of Publications, Teachers College, Columbia University, 1936. Pp. viii+117. \$160.

Show Me How to Write (In Manuscript). By Edith Underwood Conard. Three volumes. New York: The A. N. Palmer Company, 1936. Book 1, \$0.10; Book 2, \$0.10; Teacher's Guide, \$0.25. (Paper cover)

JUNIOR COLLEGE BUSINESS EDUCATION. Studies in Business Administration of the School of Business, the University of Chicago. By H. G. Shields. Chicago: The University of Chicago Press, 1936. Pp. vii+94. \$1.00. (Paper cover)

Schools for a Growing Democracy. By James S. Tippett, in Collaboration With the Committee of the Parker School District, Greenville, S. C. Boston: Ginn and Company, 1936. Pp. viii+338. \$2.00.

AN EXPERIMENTAL INVESTIGATION OF THE TEACHING OF TEAM GAMES. A Study, Applied to the Elementary School Level, of Three Methods of Teaching. By Elizabeth G. Rodgers. Teachers College, Columbia University, Contributions to Education, No. 680. New York: Bureau of Publications, Teachers College, Columbia University, 1936. Pp. v+65. \$1.60.

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For November, 1936

School Ways in Hawaii.....

PRESIDENT DAVID L. CRAWFORD of the University of Hawaii cites similarities and differences between the educational system of the Islands and the Mainland.

It's Annual Time Again....

Problems in publishing a high school yearbook are considered by Viola Eblen, dean of girls, Francis Joseph Reitz High School, Evansville, Ind.

Side Glances -

T'S the vogue to slam Suburbia, but we shall fly into the face of the trend and present next month the story of Shorewood, Wis.

We doubt that there is another town in the nation where during the last five years there have been more adults going to evening school than there are children in day-time classes.

This Milwaukee suburb is going places in adult education. It has two boards of education—a "day" board and a "night" board. The former appoints the latter, and the superintendent of schools correlates the work of the two.

It is a temptation to spill everything in advance, for it is such a good story. But we shall let Supt. H. S. Hemenway of Shorewood tell his own tale under his own title: "Let's All Go to School."

THE spectacle of more than a million teachers in the United States setting out to indoctrinate the oncoming generation with their own social and pedagogically variant and questionable doctrines of social reconstruction seems both amusing and tragic to I. W. Howerth, sociologist at Colorado State College of Education. He will tell in the next issue what to him is the one clear call to educators just now.

CHARLES W.

TAUSSIG is the president of the American Molasses Company. He is also chairman of the national advisory committee of the National Youth Administration.

Mr. Taussig thinks the American high school has a big job ahead of it if our democratic form of government is to prevail. He wonders whether or not the social and political education of our people is keeping pace with the advance in science, technology and economics.

Published monthly by The Nation's Schools Publishing Co., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$2; foreign, \$3. Current copies, 25c each. Member Audit Bureau of Circulations. Copyright, 1936, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16. 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Printed in U. S. A.

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In an article for the December issue, Mr. Taussig will state what he considers the five most important demands our country should make upon the high school in the present world crisis in government.

MILITARY academies, obviously, must never be out of step. One of them — Culver — recently found that if it was going to march along with science it would have to make some structural changes.

Careful reconnoitering was done. It seemed more strategic to General Gignilliat and his staff to remodel than to replace the original instructional facilities. That determined, orders to advance were given in June and by fall the cadets were occupying the new position. The academy's own maintenance men did the construction work.

The Editor, aided by before-and-after pictures, will describe the maneuvers for the December issue.

MONG American institutions ill prepared for the depression we must include the schools. William G. Carr, director of the N. E. A. research division, will paint a picture, "School Finance, 1930," in the next issue. Its tenor is here expressed in his own words:

"Dependent upon the local property tax, administered by an outworn plan of local school districts, burdened with debt, expected to maintain equality of educational opportunity and prevented at every turn from doing so, the system of financing American education in 1930 was, generally speaking, in no condition whatever to withstand the fiscal stresses and strains which were destined to fall upon it."

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LOOKING FORWARD

Policy After the Fact

M UCH of the difficulty in the administration of public education during the current phase of the depression period is due to the fact that when some trouble comes up both emotions and personalities are involved. It is hard enough to adjust conflicts when the emotional element alone occurs but when, in addition, these emotions can be centered upon a person, the solution is increasingly difficult.

The complete prevention of school and community conflicts is an ideal unlikely to be attained at present. The next best thing, when conflicts unexpectedly arise, is to have available some sensible means to harmonize them. Otherwise there will develop a deeper disturbance and community disorganization.

The technique for harmonizing rational differences in opinion is to provide a means of keeping principles dominant and personalities depressed. It is much more intelligent for administration to avoid the difficulties of expediency by building fences in time of quiet to provide safeguards or buffers for time of trouble. Those educational executives who have the greatest degree of success are those who do their exploratory and educational work in advance, organizing possible fields of conflict and disharmony into general educational policies which are adopted and promulgated through the board of education. These policies serve as guide posts for the profession and a basis for community appraisal as well. When in written form and well interpreted to the community, they serve to adjust individual and social thinking without necessarily arousing emotion. They must be familiar to profession, board and people.

Executive leadership which operates on the old finger and thumb rule that "sufficient unto the day is the evil thereof" usually finds itself in much difficulty. With calm disinterest this type of executive shies away from his responsibility for policy development. He hopes against hope that nothing will happen to cause trouble. Psychologically he is perpetually sitting in the same fearful and expectant attitude of last generation's sleigh driver whose profile and silk hat created strange desires on the part of boys with icy snowballs.

When trouble comes and bitter conflict develops, when the public, board of education or teacher is not certain of what the schools propose doing and of the immediate limits of possible action, there is confusion. Conflict of principles concerning action quickly degenerates into personalities, and the community begins to takes sides. Whatever the final action sore spots are left, and these fester. Sometimes the struggle continues underground for a long period after surface solution. Sooner or later some one gets hurt and it is usually the professional who pays. Then the educational press and those whose boldness is in direct proportion to the safety of their academic chair begin to belabor the community. The expedient executive now begins his work. Sensing that the snowball has been thrown and has done some damage, he rushes into action. A policy covering part or all of the issue is pushed forward. Under pressure the board of education usually grabs at any straw to ride the storm. Now the leak has been plugged and the fervent hope is that it won't happen again. But it usually does.

Children on Strike

During the course of a school year there are dozens of press reports of school children on strike. In more than half the cases these demonstrations are staged because some favorite teacher has been dismissed, disciplined, transferred to another building or not promoted. Other reasons are protest against the ineligibility of exceptional athletes, certain classroom requirements or a negative reaction against unpopular teachers.

Study of these teacher-sympathy strikes indicates only one case in which the children followed adult leadership in disapproving the attempt of partisan politics to control the school. The other cases that have come to our attention were emotional reactions, in a number of instances under stimulus or pressure by the individual involved. Teacher or principal had played to the children's interests and adolescent sympathies.

The further one studies some of these strike cases, the greater is the conviction that many members of the profession have no concept of the teacher's responsibility in his class and extraclass relationships with immature children. Teachers who make use of their position to curry special favor with children and parents for personal satisfaction or reward are scarcely worthy of consideration by the teaching profession. When they further incite these children to a revolt against the rules and procedures of a school system to satisfy their own ego or to secure unwarranted sympathy and pity for their condition, it seems to us that they should be carefully disciplined by the teaching profession itself. Their ultimate legal removal as emotionally unfitted for teaching should be considered by the state. No teacher has the moral right to use his classroom for his own selfish purposes or to exploit the children for personal gain.

A definite public opinion can be created in our school communities against this misuse of the immature. The teaching profession itself must be responsible for building attitudes that will prevent in the future such unethical exploitations.

Textbook Research

In the October Nation's Schools George L. Buck presented a sensible analysis of certain factors pertinent to recovery from depression in the textbook field. He concluded with the recommendation that an independent research bureau, sponsored jointly by educators and by the textbook industry, be developed to consider certain mutual problems. The assumption is that such a research bureau would be "free from any propagandistic charges," and at the same time "should aim to protect—," a dubious dual position for independent research.

We are in perfect agreement that there are many problems of mutual interest to educators and textbook publishers, and also agree heartily that these problems can be most easily solved on a cooperative basis. We just as firmly believe that the creation of an independent research bureau, supported by publishers' subventions, is the wrong approach to the problem. Such a bureau could not exist for ninety days and retain its independence. It would from the beginning be under heavy suspicion by the rank and file of educators, state educational officials and the people themselves. It could not defend itself against charges of partiality.

A much more rational solution of this pressing problem, provided independent research is really desired, would be for the publishers to establish a general research fund based on annual contributions by individual publishers. This fund could be managed as a trust by a joint committee of educators and publishers. The trust committee could publicize to institutions of higher learning the type of research problems for which financial aid would be given and also approve the plans for textbook research presented by such institutions. Once the activity was approved and the essential funds granted to the institution, this research committee on textbook problems would no longer have anything to do with it. The institution involved would direct the research and publish the results independently of any group or interest. Only in this way could the objectivity and impartiality of treatment be sustained before the profession and the public.

Clearing the Decks

A T THE St. Louis meeting of the Department of Superintendence a resolution was adopted requesting the cooperation of allied and guest organizations in scheduling future meetings so that overlapping and conflicts could be greatly reduced. The recommendation was an excellent one. Elimination of competition in this respect will help both groups.

The first organization to make a change in meetings was the National Society for the Study of Education. For a number of years this group has met on Saturday and on Tuesday evenings. The first meeting was always well attended, and the second rarely drew more than a few baker's dozens. For 1937, the National Society offers two Saturday meetings, one in the afternoon and the second in the evening. Both sections of the Yearbook will be discussed at these two meetings. These meetings should be a feature that will bring educators to the annual meeting at least one day earlier.

It is hoped that other professional organizations will follow this example and also attempt to orient their programs so as to secure the minimum of competition at the 1937 meeting in New Orleans.

Drop Your Ceilings

Carrain practical economies can be made in elementary and secondary schools today without affecting instructional efficiency in the least. Reference is to the height of classroom ceilings. There was a time in the nineteenth century when architectural practices in fenestration and the absence of supplementary artificial lighting made high ceilings plausible if not essential. There were also many quaint theories concerning cubic area and carbon dioxide content per child. All of these theories have been definitely exploded.

School plant specialists gradually managed to whittle down heights in the first two decades of the twentieth century from 16 and 14 feet to 12 feet. Twelve feet was considered a desirable height because many still believed that 24 feet was the most desirable classroom width. Since 1920 there has been a great tendency toward a 22-foot room. On the basis of the old assumption that height should be one-half the classroom width, it is now only necessary to plan 11-foot ceilings when the narrower width has been adopted.

Several factors have entered the scene that make these traditional assumptions a little difficult to maintain. Research in lighting has indicated the uncertainty of natural lighting during the school year in the greater portion of the country. School is conventionally held during those months that produce the least sunshine. Without auxiliary artificial lighting it is impossible to maintain that evenness so essential for steady work. The almost constitutional inability of the average teacher to operate window shades often gives us the paradoxical condition of full electric lighting in a room with window shades fully drawn on the brightest of days.

It would be cheaper, easier and more sensible to save on height, spend more money for proper shading of windows, and install automatic light control by use of the electric eye.

The use of modern heating and ventilating systems with their rapid changing of air makes untenable the theory of the high ceiling. The relationship of individuals to the physical dimensions around them is undoubtedly a psychological factor. Regardless of size of children elementary and secondary schools are still built with uniform ceiling heights. There is absolutely no reason why the heights of secondary school ceilings cannot immediately be reduced at least one foot, to 11 feet; and elementary school ceilings one or two feet, to 11 or 10 feet. The savings would be significant.

Assume a two-story elementary building with a capacity for 1,120 children designed as a solid square with the large units—auditorium and gymnasium—centered. Reducing the ceiling heights from 12 to 11 feet would result today in a saving of \$14,000 in construction alone, and an annual decrease in heating, ventilating and upkeep costs of from \$200 to \$500. If the life of the building is estimated at fifty years, this operating reduction would total \$10,000 to \$25,000. Such savings are significant! If the ceilings were dropped 2 feet, a perfectly sensible procedure, the savings would practically double.

The possibilities of real economies in building by studying height reductions in two and three-story buildings are distinctly worthy of the most serious consideration by administrators and building specialists.

Advertising in Schools

ATTEMPTS to secure extra sources of revenue, beyond the amounts provided through taxation, have resulted in the development of many activities, particularly in small school systems, that are undesirable and also dangerous from the standpoint of the school as a social institution. These attempts include the selling of specific trade products exclusively within a building and providing direct producer publicity to stimulate the sales. In this manner senior classes and parent-teacher organizations make small cash percentages on sales and thus build up their funds.

Ill advised neighborhood advertising, obtained through either child or parental pressure, to support athletic and dramatic programs or school papers is another dangerous practice. No merchant likes to be driven into making contributions for advertising that is patently unproductive. He contributes because of pressure and his subconscious resentment of this institutional appeal does not increase his friendliness for the institution.

A more recent development has been the selling of advertising space in auditoriums and gymnasiums. In the better expressions these display ads are carefully placed under glass in a neat wall case or as borders to a scoreboard. In others they seem to be hung around gymnasium and auditorium walls at random. Other practices of this kind involve the use of educational supplies, pens, rulers, scratch pads, calendars and even equipment provided free by certain agencies that hope to create favorable adult attitudes by the introduction of these materials in both school and home.

All of these practices are to be condemned. The public school is no place for display advertisements of any commercial nature. Our educational institutions should be kept free from commercial propaganda whether given free or paid for in cash. Ultimately, these attempts will lose more in public good will than they provide immediately in additional revenue. At any time, they are extremely bad taste for a public institution.

At Williams College

BLISS PERRY'S delightful reminiscences, "And Gladly Teach," had increased the pleasures of vacation. The idealism he unconsciously developed about Williams College made us turn aside to spend a night in the minute community built around this institution. In the soft twilight of early fall a leisurely inspection of the elm-swept campus thrilled us. The old and new buildings in their lovely New England setting blended harmoniously despite certain individual architectural incongruities. Here at last was an institution that had retained its ideals!

Bright faced undergradutes told us of the rigidity in the selection of each incoming class. More than 800 applicants annually and only 260 of the most promising actually accepted for membership. No deference to commercialized athletics! No concessions to political expediency! Just high standards objectively maintained. Williams picked quality.

We drifted through the campus, finally stopping in the dusk before an impressive stone structure that did not indicate any particular specialization. We concluded it must be the library. Just then a student wearing a sweater with the coveted "W" passed. Please, could he tell us if this structure was the library? "No," said he, "this here is the gym."

The Editor



SUPPOSE that the average American, when he thinks of Hawaii, has a mental picture of palm trees, surf riders and grass-skirted hula maidens; such things as schools and colleges are probably not in his picture.

He does not realize that practically the same compulsory school attendance laws are in effect in Hawaii as in the rest of the United States, and that most children are quite as seriously in pursuit of an education until the age of eighteen and many even to twenty or twenty-two.

One of the most striking discoveries of many a visitor, on arriving in Honolulu, is to find that the school system is just like that of all American cities. In fact, the discovery goes deeper than that—the educational program in Hawaii was thoroughly American long before annexation in 1898 made this mid-Pacific territory

School Ways in Hawaii

By DAVID L. CRAWFORD

a part of the United States. The schools, from the beginning a hundred years ago, have been patterned on the American plan and have used American methods and techniques. Annexation presented no problem so far as education was concerned; the schools just kept on doing what they already had been doing well.

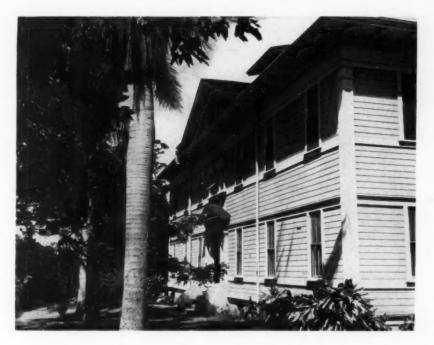
For a total population of a little less than 400,000 there are nearly 200 public schools, and a score or more of private schools in addition. All the public schools, both elemen-

tary and high, are in a single system, administered from one central office in Honolulu, and all go by the same standards and receive the same support. Teachers in rural schools are paid as well as city teachers; the school year is the same in length, and the curriculum is as good but is adapted somewhat to the special features of environment.

More than 90,000 boys and girls and young men and women are attending educational institutions in Hawaii. This number is more than







One of America's oldest print shops (above) is that of Lahainaluna School (left), where was produced, in 1834, the first newspaper to be published west of the Mississippi. On the opposite page is Honolulu's newest high school, the Roosevelt.

25 per cent of the entire population and unusually large for any community.

The high schools of Hawaii are recognized throughout the United States as quite the equals of high schools anywhere, so far as preparation for college is concerned. In addition to this, some of them are branching out into experimental efforts aimed at the better fitting of youngsters for the complexities of modern living, on the assumption that half or three-quarters of their pupils will not

be able to receive college training.

Many do go into higher education. Four hundred or so freshmen come each year to the University of Hawaii and some more go to mainland colleges and universities. In their home university they find excellent facilities in practically all standard lines, for the University of Hawaii is fully accredited by the American Association of State Universities, of which it is a regular member. It is a landgrant university and receives more than \$150,000 annually from the fed-

eral government for its maintenance. Approximately two-thirds of its maintenance expense is borne by the territorial treasury and the balance is paid from student fees.

About one of each ten students in this university comes from outside the Territory of Hawaii; more than half of the states are represented by anywhere from one to twenty students each, and a good many foreign countries have young people here, also. Altogether it is probably about as cosmopolitan a body of students as one could find anywhere, and all get along together remarkably well.

Especially do mainland students like to come to Hawaii for the summer period, for then the university offers a particularly attractive and stimulating lot of courses given by world-famous lecturers brought to Honolulu for the summer session. At the same time it is possible to have

an enjoyable vacation of six weeks in a spot to which everybody in the whole United States wants to go, some time.

Hawaii has one of the oldest schools in the Western United States at Lahainaluna, on the island of Maui, a few hours' trip from Honolulu. It started as a theological seminary and is still active and growing.

Like many things in this mid-Pacific American territory, it had its beginning in the missionary days, a result of the efforts of that devoted band of zealous evangelists who came to Hawaii in 1820 from New England, around the Horn.

One of the first things the missionaries did was to start teaching natives to read. They printed their first textbook at Honolulu, in 1820. The natives were eager for learning, and by 1826 there were 400 native teachers in various parts of the islands and a third of the population was attending school. At that time nearly all the students were adults, for the Hawaiians did not want their children to be educated before they had acquired the new learning themselves.

The missionaries, however, worked hard to build schools for the young, and especially a training center for native missionary teachers. In 1831 they founded Lahainaluna Seminary, the first high school in the islands, with the Rev. Lorrin Andrews, compiler of the first Hawaiian dictionary, as director.

The school had a struggle in its early years. It began operations in a shed constructed of poles and grass. The young king, who voyaged to Maui to attend the school, gave it up because of the lack of comfortable accommodations and adequate facilities.

More humble students, however, were not so easily discouraged: The students, in the next year, built a more substantial schoolhouse with their own hands. They climbed the mountain to cut trees, hauled them down to the site, hewed out planks and built not only walls and a roof but desks and benches. They collected stone for the floor, and made mortar by burning lime from coral. The fuel for the burning was carried from the mountains on their backs. They even made window shutters.

At first there were twenty-five of these students but by the end of the year the enrollment had grown to sixty-seven. By 1839 there was a faculty of three missionaries, one missionary teacher and one printer, and the school was becoming, as had been anticipated for it, "the grand nursery of education in the islands."



McKinley High School, Honolulu, has 3,000 pupils and buildings costing almost a million dollars.

When the government organized a school department in 1846, it took over the common schools, and later gradually absorbed the higher institutions, then known as "select" schools. Lahainaluna was transferred to the government in 1849. When the islands became an integral part of the United States, in 1898, Lahainaluna was still flourishing, and today it is Lahainaluna High School, a part of the territory-wide public educational system under the department of public instruction. It has seventeen teachers and 330 pupils, doing regulation high school work.

Lahainaluna is firmly bound up with the early history of Americanism and Christianity in Hawaii. A printing plant was installed there in 1834, and the first newspaper, Ka Lama Hawaii, or The Light, was printed there, with illustrations engraved on

wood. The edition was 200. The first book produced there was Worcester's Scripture Geography. The students were eager to learn the printing trade and made their own composing sticks, of wood.

Among the distinguished students of Lahainaluna was David Malo, the Hawaiian historian, whose "Hawaiian Antiquities," now out of print, is a mine of information for students of Polynesian ethnology. The celebrated Fornander papers, a collection of Hawaiian lore compiled by Abraham Fornander, were derived in part from compositions on Hawaiian subjects written by students at this school.

A few years before Lahainaluna celebrated its centenary, an alumni association was formed. Thomas Treadway, of the class of 1888, former territorial auditor, was hailed at that time as the oldest alumnus.

Where Rural Schools Equal City Schools

By O. W. ROBINSON

HAWAII's rural schools are as good as her city schools. This is true not only of school plants but of supervision, training and certification of teachers, salary schedules and curriculum.

Hawaii is small—only 5,000 square miles of land area, a series of dots in the middle of the Pacific Ocean. There are now about 390,000 persons living in the territory. Slightly more than half of this number live in the urban areas of Honolulu and Hilo. A little less than 90,000 children are enrolled in the public schools in grades one to twelve inclusive. Of these slightly less than 40,000 are enrolled in the city schools of Honolulu and Hilo. There are, therefore, almost exactly 50,000 children enrolled in rural schools.

The typical school plant in Hawaii is a one-story frame building in the shape of an H or U with all classrooms opening on to the porch or

lanai. This type of structure is possible by reason of the fact that no central heating is needed.

The central unit usually contains the office, library, rest rooms, dispensary and frequently the auditorium and cafeteria. The shop, home economics and vocational agriculture rooms are commonly detached from the main building.

The average elementary school campus is about five acres in extent, giving space for gardens and some landscaping in addition to playgrounds. Not all school grounds are as ample as this, some of our largest city schools having a much more limited area. McKinley High School in Honolulu has a campus of about fifty acres.

Lahainaluna High School, a rural school, owns an area of nearly 600 acres. Part of this is used for the production of sugar in cooperation with the plantation. This large area is in great measure the result of accretions during the school's century of existence. It has been a public school for about twenty years.

The average rural elementary school has seven or eight classrooms. Many are larger and there are, of course, several one and two-room schools.

Vocational education and the divisions of health and dental education are organized as territorial services. Expansion of work and the offering of new courses in any school or district must be determined in the light of the total territorial need and not at the whim of a local school board.

Vocational and prevocational work along three major lines-agriculture, trades and industries, and homemaking - is offered in most of the schools. Territorial supervisors especially trained in these fields are subject to the call of the supervising principals. These supervisors send materials or go in person to any schools throughout the territory where new programs of vocational or prevocational work are to be established or to give assistance when difficulties are encountered. Vocational home-making is taught in fifty schools-ten city schools and forty rural schools. Vocational agriculture is taught in thirty-four schools-five city and twenty-nine rural schools.

Two rural schools, Lahainaluna and the Hilo Boarding School, each more than a century old, were among the American pioneers in vocational work. Lahainaluna was operating its printing plant when it is claimed there was no other press west of the Rockies. The work done at Hilo Boarding School gave the incentive for the establishment of the famous Hampton Institute.

One hundred and twenty of the 184 schools of the territory have cafeterias. The department of public instruction pays the basic salary of the manager and furnishes all equipment. Beyond these items the cafeterias must be self-supporting. The average daily service is about 35,000 hot lunches, the typical lunch being a five-cent service.

Community Christmas

By LESLIE J. F. EDMUNDS

POR several years various organizations in Royal Oak, Mich., have assumed the task of supplying toys, clothing, food and fuel to needy families. The depression made the problem more serious. Lack of unity allowed the "good cheer" of various organizations to be duplicated in many instances and many families equally in distress were left out. To overcome this, efforts were made to establish a clearing house.

Early in the fall of 1935 the annual drive became organized. A central committee was formed. Its membership was made up of representatives of the lodges, churches, clubs, Salvation Army and unattached public-minded citizens. With the cooperation of the welfare and health departments, the Community Union and the schools an extensive list was prepared of families needing food, toys, clothing and fuel.

A clearing house was set up in which all families reported as needing aid were investigated to determine the aid needed. This prevented duplication of names. Printed forms were furnished in triplicate, one copy for the family head, the other two for the investigators and distribution center.

Funds were solicited with which to purchase some things of which an insufficient supply had been provided by generous homes; also to purchase repair materials for the toys, dolls and clothing.

Leaders in the community accepted certain assigned tasks and invited their friends and associates to join in soliciting used clothing, toys, dolls and playthings, and to collect, repair and deliver them to the distribution center.

The elementary schools joined earnestly in gathering all kinds of

dolls, doll equipment, games, toys, books and playthings, all of which were sent to the junior high school where a sorting room was established. Here toys were examined and appraised. Those worth repairing were sent to the shops in the various schools and pupils repaired and repainted them. The sewing and art classes took over the dolls and doll clothing and bedding, washing all dolls, retinting many and laundering the soiled items. Teachers cooperated splendidly, working during classes as well as out-of-school hours. Pupils came Saturdays and many took things home to work on. Individuals and groups of townspeople assisted in sorting and repairing. All were eager to have a part in contributing good cheer to those less fortunate classmates and neighbors.

When completed the things were sent to the distribution center, a room in a centrally located office building, the heating and lighting of which were donated by the owners. Thanksgiving and Christmas baskets of food were also collected in the schools and sent to families in distress.

At the junior high school motion picture assemblies were held. Admission was a toy, doll, game, book or plaything. Those unable to gain admittance in that manner paid 5 cents to attend. A contest among home rooms was sponsored to see which would bring the greatest number of contributions. One room brought 276 items. In the entire junior high school, having an enrollment of about 850, about 2,000 usable items were contributed by the pupils.

At the distribution center the toys, clothing, dolls, books and games were arranged on tables. The parents brought their "orders" from the investigators and were allowed to choose those things reported needed. The gifts were wrapped and taken home by the parents as if they had been obtained from the stores, thus causing the least embarrassment within the families.

When December 24 came we still had a large supply of items on hand. Many were taken to near-by localities for distribution through their social workers. The remaining funds and gifts were turned over to the Salvation Army to store and to be used as a nucleus for the next year.

When school closed for the Christmas holidays and the work of the central committee was finished, there was a unanimous feeling of happiness for having had a share in spreading Christmas cheer and for a community service that had been well done.

Elementary pupils gathered toys and games. The junior high set up a sorting room. School shops repaired and repainted toys. Sewing and art classes took over the washing and retinting of dolls and doll clothing. Teachers worked in class and after school. Pupils came on Saturdays. All hands worked as a unit in a community-wide movement to give the town's needy what they really needed to celebrate Christmas.

The Social Hermit

What Can the School Do for Him?

By ROLLAND H. UPTON

HILE taking precautions that no child shall go through school without being exposed to certain minimum essentials in a number of divisions of subject matter, most educators are aware of the fact that an enriched social experience is fully as important as any type of factual knowledge. It is therefore logical to ask this question: Why not a minimum essential program for social experience?

The answer often given to the question is that human relationships are not objective. They cannot be classified like number combinations and multiplication tables. A more truthful answer would be that many human relationships are not objective. A limited number of them can be classified.

It is within the scope of this limited number of social contacts that the school administrator may avail himself of the opportunity to make the school program more effective as a socializing influence. Without any suggestion of adding another subject to the overburdened curriculum, patterned after the plans which make mandatory the teaching of "kindness" and "patriotism" a specified number of minutes each week, the administrative head of any elementary or secondary school may well examine the program of his system to discover what provision is made that every child under his care shall live through certain definite social experiences.

Planning the Social Program

This applies especially to the children who are not socially minded. Even under a haphazard program there are always certain members of the student body who will make normal and wholesome social contacts. It is equally true that even under a

well planned and executed program there are a number of social hermits who will seek to withdraw themselves from the types of human contacts they need most.

In the hope that they will assist the school official in making the program of his school more objective with respect to the social experience of the pupils, the following questions are raised.

1. Is there provision for all the children to meet socially for no other ostensible purpose than that of having a good time?

School-Sponsored Social Events

When class parties and pupil dances are mentioned the average school official thinks of possible trouble. The many levels of society represented in any community contribute to the problems presented when the school sponsors a social event. These problems are not a barrier but a challenge. The school is equipped as is no other organization to provide for wholesome social fellowship between the youth of the community. The opportunities offered should be of such a nature that all the children may participate. They need not, in all cases, be extracurricular. Home room periods can be so scheduled that the less elaborate types of parties and entertainments may occur during school

A quiet but painstaking effort should be made to the end that the less socially minded members of the group will attend and participate in all such affairs. The teacher or adviser will find that certain members of the group itself can be enlisted to assist in bringing this about. There is

no better opportunity available for teaching unselfishness and social responsibility.

2. Does every pupil, at one time or another during the year, have an opportunity to serve as a class officer or committee member or in some way discharge a definite responsibility to his school community?

It is natural that school groups should look to outstanding children for leadership. From an educational standpoint, however, it is important that members of the group not so favored by nature with the outward qualities of leadership have an opportunity to participate in experiences involving public service. While there may be only one logical class president, there can be thirty committee members who may be made to feel that they have an important responsibility and that the success of some undertaking depends upon their reliability.

Passing Around the Offices

In the lower grades of the elementary schools the "presidency" of the class is an honor that can be passed around to every member during the course of the year. The term of office will be for one week only but every child will have the opportunity of calling the meeting to order and announcing that a motion for adjournment is in order. Items of this sort do not seem trivial when it is remembered that the schools of America are charged with the responsibility of educating children for participating in a democracy.

3. Who are the children who take part in the school assembly programs? Are they the children who like to appear in public or does every child in school participate?

Two objectives must be considered in a discussion of school assemblies. the entertainment and education of the audience and the development of the entertainers. If the first objective were the only one the children who participate might well be selected from a small fraction of the student body. When the second is considered, provision must be made for every pupil to share in this experience. It is not necessary that all assembly programs place equal emphasis on both objectives, in fact, this is usually impossible, but there is a place for both types of auditorium program in every school.

The school assembly program that aims at the development of the performers may well be one in which the audience is small, but every child should have repeated experience before an audience. Why should any child go through the public schools without knowing that delicious sickening feeling, that instability of the knees, that trip-hammer beat of the heart, which accompany any encounter with an assembly of hearers?

A good administrative device is to divide the school into auditorium groups with a regularly scheduled period for programs. Each class is assigned a turn in entertaining the other classes in the group. If it is plainly understood that every child must perform once or twice a semester the timid boy or girl will begin to seek about for the type of participation that is best suited to his or her ability.

Another type of entertainment suited to the development of the pupils is the one in which parents are invited into the classroom. This has long been a wholesome activity for children in elementary schools and it offers possibilities for adaptation to the secondary level.

4. Do the children in the school have opportunity to enjoy together esthetic experiences such as are afforded by contact with nature, art or music?

This question does not refer to sub-

jects in the curriculum except as they provide for social experiences. There is a sense in which appreciation of the beautiful is purely a personal matter. The social influence of a beautiful song may be subordinate as a person hears it sung by another but the experience of participating in melody with thirty other voices to produce a chorus that satisfies the ear and lifts the spirit is not purely personal.

Interpreted in this manner, the average educator will answer the foregoing question in the affirmative but he may well ask himself how rich and how varied are the experiences offered. Trips to museums, field trips

The mere act of setting down the name of a child as one who needs help and direction in his social attitudes is the first step toward correcting his difficulties. Six questions are raised in this article in regard to the school's responsibility as a socializing influence

for nature study, group writing and creative effort in art and the drama suggest a whole field of socializing influences.

Far too many classes in music or in art are conducted to develop the skill or appreciation of the individual but with little thought as to the influence on pupils as members of a social community.

5. Does every pupil have a form of self-expression, recognized by himself and his class as something that contributes to and justifies his place in the school community?

Much social maladjustment is caused because there is no opportunity for the individual to satisfy his craving for recognition. All too few types of achievement are recognized in public schools. There will always be too few as long as there are not enough to go around. The child who can quickly assimilate and clearly report on factual knowledge can win a coveted place as a successful pupil. The one who can sing or speak well or hit a baseball squarely on the nose feels that his efforts are recognized and appreciated by his fellows. But unless a child's talents and inclinations fit into a pattern cut along lines dictated by standard forms of achievement, he may be denied recognition as an individual.

It is certainly true that a good many bad boys are bad because it is something at which they can excel. There should be a wide variety of recognized avenues of achievement in a socially minded school.

6. Do I as an educator know which of the children entrusted to my care are inclined to withdraw themselves from wholesome social contacts?

The correction of nonsocial attitudes in children is an individual problem. No two children have the same set of maladjustments contributing to the conditions that tend to make them social hermits. Before any teacher can lead a pupil toward a fuller social life he must first be conscious of a need on the part of the pupil.

The mere act of setting down on paper the name of the child as one who needs help and direction is the first step toward the correction of his difficulties. A period of time devoted to systematic thought on the problem of social development as it applies to individual pupils is a good pedagogic investment.

Educators dare not allow socializing influences in their schools to follow an unplanned course. The fact that difficult problems are encountered does not minimize the importance of a definite program of community experiences for all pupils. There is much in the social life of every school child that no one, not even the child himself, can control but there is a wide field of human contacts where the school can and must reach out a guiding hand.

Planning Your Publicity

By ERIC T. TEBOW

HE changed character of educational interpretation resembles the innovations that have taken place in education itself. In the early American school, for example, the teacher assumed that there were a number of facts that should be learned, and that the way to familiarize pupils with them was by persuasion, if possible, by drilling if advisable, and by force if necessary.

Although educators now have largely discarded coercion in the classroom, they sometimes use unnecessary pressure in connection with social interpretation. They seem to have taken a leaf from the notebook of business. For years, many business interests conceived of public relations as a program of putting something over on an indifferent, if not an antagonistic, public. Therefore the use of the terms "public relations" and "school publicity" for entirely legitimate procedures convey to some persons the unfortunate implication of pressure methods. While these terms may be used here, they are meant in the sense of constructive and forwardlooking eduational interpretation.

Cultural Tone to Program

Educational interpretation calls for the application to public relations of the principles of modern teaching. For example, those reached by such a program should become interested in the schools because the facts appeal to their intelligence and satisfy their desire for information. It is not simply a case in which a professional group chooses facts that it wishes to put across to an unwilling public. The citizen should not be a passive spectator but to a greater or lesser degree an active participant in the public relations program.

Through service on boards of education, through membership on committees of the parent-teacher association and through contacts in public groups, the individual citizen develops an appreciation and understanding of educational problems and assumes responsibility for keeping himself and others informed. With this educational point of view, the whole program of public relations assumes a scientific and cultural tone commensurate with the progressive teaching methods of the modern school.

Two Chief Considerations

Suppose you and I are to work together in planning our program for this year in public relations.

There are two definite things we must consider. These are a good-school, and an informed public.

The two do not necessarily go together. We may have a good school and yet there may be a gap between it and the public. Or we may have—and very likely do have—a public that wants to know about our schools, be they good or otherwise. More often we have a good school and are decidedly weak in informing our people of what we are trying to do.

Needless to say a good school can be had with an alert and wide awake administrator and a competent and energetic staff.

Now we must decide what type of a publicity program we are going to have. Our problem is to keep the public informed in spite of the obstacle. The solution means a constant stream of impersonal, factual information upon all phases of the subject involved, presented through numerous agents and agencies in simple condensed form. Stated briefly, the public school relations program calls for continuous information that must be (1) true, (2) brief, (3) frequently presented, (4) understandable to all and (5) accessible to everyone in the community.

The classroom teacher's power to develop public opinion is an area often overlooked with dire results. In the first place, efficient classroom instructors not only influence the attitude of pupils but can impress school patrons with the dignity and social interest of the teaching profession. They come in contact with visitors and through such relationships create either favorable or unfavorable public attitudes. As citizens in the community, they are in contact with persons in many fields of social and economic life. In all of these varied relationships, they help to develop attitudes toward the work of the school. They may spread truth or biased rumors.

Even the best principled teacher, when uninformed, may be a liability to the public relations program. It is exceedingly important that all members of the school system have a common background of facts pertaining to the school. Upon the principal and the superintendent falls the responsibility of providing teachers with this information.

Role of Pupils and Teachers

A second important agency for interpreting the schools consists of the pupils themselves. If adults are to know and to understand their schools, they should have a chance to study public education at the time when they are pupils. Many of the boys and girls who, ten years ago, were in some of our classes are the men and women in local businesses today, and they have a great deal to say about what schools shall and shall not do.

If pupils are thoroughly indoctrinated with the necessity and importance of good schools while they are in our classes, they will later help us in time of need in building our school spirit. There are some who may say that this will make teachers propagandists for their profession. It might be said that teachers are entrenching themselves by creating a prejudice favorable to education at a time when children are too young to put up an effective resistance.

This line of argument deserves no more recognition than one disapproving the teaching of economics because it will produce business men or citizens with viewpoints favorable to business. A skillful teacher can help through economics to develop a sane appreciation of economic values, and business principles. The study of government should magnify the ideal of efficient and honest public office. A study of education may lead not only to an appreciation of schools but to greater interest in the cultural improvement of society.

A third important agency in school interpretation consists of the school news column in the local paper and the school's own paper.

Plans for interpreting the school should include a vitalized commencement. At no period of the year is there a more opportune time for selling the school to the community than at the pinnacle of the year — commencement. Some theme can be selected by the pupils and the program worked out of the class work.

School exhibits at fairs and stock shows should certainly be considered. Many parents and patrons of the district who are not parents will see work and develop an interest and a confidence that cannot be secured in any other way.

Some type of summer catalogue or bulletin could be issued as an appeal to pupils to attend high school. This bulletin can include a great deal of material of interest to taxpayers.

The complexity of modern life and the rapidity of social changes have tended to obscure the fundamental place of the school in the social organization. The passing of this cloud before the public mind has produced at times an apparent indifference to the social contribution of education. Alarmed, many educators have sprung to the task of building into citizens a faith in education and a willingness to support and to improve the school.

The best plan of doing this is that of continuously interpreting the schools fully, calmly and frankly. Citizens are invited to examine the educational process, to give suggestions and to participate in the satisfactions of child culture. Such a program has certain definite characteristics:

1. It is broad and forward-looking

in its conception of society as an ongoing process.

- 2. It is a continuous plan.
- 3. It enlists the active participation of laymen of all types, as well as teachers, pupils and administrators.
- 4. It is a varied plan, utilizing the intangible social contacts as well as the more concrete devices of the newspaper.
- 5. It is a fundamental plan in which education as an essential element of society is stressed, and taxation, salaries and budgets are of secondary importance.
- 6. It is a long-time plan which builds into the lives of youth an appreciation of the educational heritage.

Some Have Special Needs

By ELISE H. MARTENS

In Speeding educational equality for children with special needs, there are four avenues of approach. These are (1) the individual educator in the school, (2) local school authorities, (3) state authorities, and (4) national and federal agencies.

In the last analysis, every application of educational equality must be made by the local superintendent, principal and teacher, who have the immediate welfare of children in their hands. Unless these persons are sincerely concerned about the matter, educational equality will never be realized. The extra expense involved, however, makes it impossible for them to bring about such equality without the support of local and state authorities.

The local community and the state are the logical agencies to share in the expenditure. The program developed for children with special needs should include: (1) special classes or other special instructional provisions, with all the equipment involved, in keeping with the needs of each group; (2) transportation to school for those physically unable to attend otherwise, and instruction at

home for those physically unable to attend at all; (3) local clinical service for the physical and mental health of children whose bodily or emotional needs demand it; (4) well regulated state educational institutions of a residential type for boys and girls who are totally blind or profoundly deaf, who are delinquent, or who are mentally deficient.

This four-fold program is equally applicable to city and rural areas. It cannot operate effectively on either a citywide or a statewide basis without competent supervision that inspires the classroom teacher and improves classroom practice.

Finally, national and federal agencies can do much to speed educational equality. A score or more of national voluntary organizations are already in the field focusing public sentiment upon the needs of exceptional children.

Perhaps some day the federal government will see fit to parallel the Social Security Act with another provision, to be administered by educational authorities, that will help the states to bring about educational security for handicapped children.

Teaching Small Children to Type

By OCTAVINE COOPER

TYPING is rapidly becoming a necessity, in recognition of the fact that it is the most efficient tool for written communication. Its use will tend to become much more widespread outside of the school in the near future. If this assumption is accepted the problem confronting educators is rational grade-placement and methodology for this activity.

Typing for kindergarten, primary and postprimary school children, in a sense, is no longer an experimental procedure, for Dr. Ben D. Wood of Columbia University and Dr. Frank N. Freeman of the University of Chicago have proved the typewriter to be an educational instrument of worth to younger children.

Having become convinced, after examination of these studies, that certain basic principles in habit formation had been violated in the experiments made thus far, I decided to begin another study in this field. In this experiment the purpose was to teach small children by the touch system of typing rather than the "hunt and peck" system, the method previously used. A secondary purpose was to help the typing pupils grow in an educational way as they worked.

A preliminary experimental class was organized in March, 1933, in the Colorado High School building, with an enrollment of twelve pupils whose ages ranged from three to eight years. I taught these pupils four days a week, for fifteen minutes a day. A certain amount of drill and review work was first given so that these small pupils could learn the keyboard in an attractive way. The drill, in itself, created interest in typewriting. It was continually redressed and varied until the pupils did not realize

that they were doing the same thing over and over again. When these children learn by the touch method the position of a certain letter on the keyboard, they learn and hit it with as much ease as they learn and say, "Under a spreading chestnut tree . . ." or any other memorization activity.

At the end of a two months' period these small children could operate the typewriter by the touch method. The accompanying illustrations are some of their work.

In September, 1933, another ex-

perimental class of small children was organized to learn typing by the touch method. There were fourteen in the class, and their ages ranged from four to eleven years. In two and one-half months, to Thanksgiving of 1933, nine out of this class demonstrated their typing ability before the commercial section of the state teachers association which met in Austin that year.

The preschool age group showed how they could type such words as: hut, mum, nun, jug.

The first, second and third grade pupils, to show their skill, typed a sentence which Dean Fitzgerald gave



them. It was: "We are glad to be here."

One in this group typed it three times without making a mistake, with commercial teachers, superintendents

We are glad to be here. We are glad to be here.

Ww ane glad to be here. We are glad to be here.

Martha Jene Watson Age 7

juyj jenj jenj kik,k lol.1;p;/; frtf f dedod swezz eqezze jhfg juyj jenj kik,k lol.1;p;/; frtf fvbf dedod swezz eqeze jhfg kik,? jjjjjjjjjjjjjjjjjjjj

Once there was a little girl named Alice. She lived in a big white house. Near the house was a large fish pond where Alice played.

Alice watched to see the birds and the bess. She liked to see then fly from tree to tree. What will the bird sing? and some college professors of the state watching her. The others did almost that well. It seemed certain to those who observed this class that typing could be taught to small children by the touch method with practical results.

The success of these two preliminary trials demanded more extensive experimentation. In the fall of 1934 classes were established in a much larger way.

In December, 1934, with the assistance and consent of Supt. John E. Watson, the pupils' parents and a group of teachers, twelve classes were organized, with approximately twelve members in each class including the first, second, third and fourth grades. The basis of admittance was desire, plus fifty cents per month. The fee was charged to pay for the typewriters.

Small movable tables and chairs were obtained from a local government project. Twelve new portable machines were purchased. Portables are used because they are cheaper and can be carried easily from one building to another. They stand rough treatment well.

Lack of room made it necessary to set up the tables, machines, chairs and charts in a corner of a corridor.

The teachers for this project were recruited from my vocational commercial classes in the Colorado General Continuation School (Smith-Hughes). They taught under direct supervision, while I held at least two demonstration classes daily. While these little typing pupils were out of their home room for their typing instruction, the other members of the class were engaged in some purposeful seat work activity.

In the first classes the pupils who could come to the high school at 6:30 p.m. were selected. Later, when this work was put into the primary schools, the pupils were selected who could pay 50c per month fee, or who, in the teachers' opinion, needed the work to improve their other class work. This left about half of each class that did not take typing. This



The teacher uses a chart in teaching small pupils.



Both portable and standard sized typewriters are used.

enabled us to compare the work of all in class and to put a value on the typing taught in the primary grades.

The manual used for the daily lessons was written especially for this work. The lessons were integrated with other school activities or subjects. No mention was made of speed or of learning typing to hold a job, but emphasis was placed on accuracy, neatness, arrangement, language, spelling, reading, health, social science and elementary science. Each of these subjects shared in the benefits coming to the children in the typing experience. Each elementary school subject was integrated with the work in typing. The examples that follow show how this was done:

- Reading is taught, for each child must read the sentence he types. Also he reads because he enjoys reading his typed paper to his home teacher and mother.
- 2. Spelling plays an important part in typing. In writing a sentence each word is visualized before the word is

written; thus a mental picture is formed and he learns to spell the word. A desire is also created to spell words so that he can type.

3. Language is taught in many of the lessons because mimeographed pictures or pictures pasted on a piece of typing paper are given to the pupils from which they make telling sentences and type them. The next day the child is asked to write sentences that ask questions about the picture; thus the interrogation sentence as well as the question mark is learned. Sometimes the child is asked to compose a story and it is typed the next day. Often the pupil asks to type such papers as a letter which he has written to, or for, his English teacher. In other classes little newspapers are typed.

4. Health and geography booklets can and have been typed by these children learning to type.

On May 17, 1935, a public demonstration was given, with 450 parents, teachers, classmates and interested

O Little Town of Bethlehem

O little town of Bethlehem
How still we see the lie;
Above thy deep and dramless sleep
The silent strars go by;
Yet in thy dark streets shinsth
Thee ever lasting Light;
The hope and feers of all the years
Are met in thr to -nighy

Lois joan Mann

abcdegghijklmnopqrftuvxyz

Nancy can ride the pony.

Virgil Pickens

She lives in the little hut. She lives in the luttle hut. She lives in the luttle hut. She lives in the little hut.



Running off on a mimeograph machine a stencil she has cut.

patrons present. Demonstration hours were from 9 a.m. until 2:30 p.m. with pupils typing for fifteen-minute periods.

The typists appeared to enjoy displaying their ability. The children were as much at ease with an audience as in their regular classes and their work was just as efficient.

This touch method of typing taught was not made formal; neither was it forced upon them. In fact, it was made so interesting that one parent punished her child by keeping him away from his typing lessons. His behavior improved, and he was soon back in class.

Another pupil brought up the average in each of his subjects on his report card because he was told by his parents that would be the only method by which he could continue his typing. Bobby was heard to exclaim one day as the bell rang, stop-

ping the small boys' free-for-all football game, "Oh Boy! It is time for typing!"

Another child told his mother, after he had missed a typing lesson because he failed to hear her call, "If I don't hear you the first time you call, then call again. If I don't hear that time, then keep on calling until I do hear. I do not want to miss my typing lesson."

Certain tentative conclusions derived from the study made of teaching typewriting by the touch method to small children are that:

- 1. There is no nerve strain or eyestrain because the child has developed a touch habit, and he hits the keys automatically.
- The small child develops the touch habit almost as quickly as a high school pupil does.
- 3. The primary pupil learns to write words and sentences more

quickly on the typewriter than by long hand.

- 4. Writing, arranging and filing typing papers in a neat, orderly way develop systematic habits in which the child takes pride.
- 5. Typing appears to help a child in all his other school subjects because it is closely integrated with them.
- It appeals to the child's mechanical interest, and as a result he learns it quickly and well.
- 7. For a child to develop the correct habits of distinguishing work from play, and in order to form the best habits of learning typing by the touch method, he must not be allowed to play with his typewriter, at home or at school.

For those who may be interested in experimenting further in this field, I offer a number of suggestions:

- 1. The machines should be kept in a laboratory in which pupils will have access to them during a period set aside for the formal teaching of this work. The instructor may be the home teacher who is supervised by a special typing teacher just as drawing, public school music and penmanship are often taught. A better method would be to have a specialist (commercial teacher) employed for each building to teach typing to all the pupils.
- 2. A new keyboard chart should be made that would have small letters instead of capitals, for primary children cannot understand the fact that they see capital letters on the charts and small letters on their typed paper. For instance, a primary child, when being taught H from the chart, said that she was not typing h. Miss Cooper looked and insisted that she was. Then Dana Marie exclaimed, "Oh, it's a different h."
- 3. Educational or achievement tests objective measurements which would show the progress in mental development of the pupils taking typing *versus* the status of those not privileged to do so should be given.
- Accuracy typing tests should be worked out for all classes. No speed tests should be given.

It's Annual Time Again

By VIOLA EBLEN

OW can the publishing of a high school yearbook be managed in order to make it a success from all angles? First, care should be exercised in the choice of the advisers connected with the book, for a great deal depends upon them. It is not their duty to perform the work, but it is their duty to direct and steer it. The second thing to be considered is the wise choice of the staff. It should be selected from the standpoint of ability instead of prejudice. No distinction except merit should receive recognition.

At the Francis Joseph Reitz High School, Evansville, Ind.,* a committee composed of seniors and faculty met and, with the class roster before them, discussed those who possessed ability to fill each place on the staff. Careful consideration was given each member, and the recommendations were advanced to the class for acceptance or rejection. That the class never failed to accept the list proposed by these two committees was proof of the fair and careful consideration given.

The staff should be chosen not later than the latter part of the junior year. For several years it was the custom in this school for the staff to be organized into a news English class the second semester of the senior year, the bulk of work on the contents of the book coming then. The class met daily and members received credit for an elective in English. The adviser on the compilation of the book was the instructor and thus came in contact with each member of

the staff every day. Class time was spent in discussing and planning sections of the book, in making assignments for various units and in putting together the entire book.

The classroom was the work shop. If the work on the book did not consume the entire semester, some other project was developed to give the class sufficient work to earn a credit. If such a class is not organized, then a regular time and place should be set for the staff to meet during the time the bulk of work is being done, and full attendance at these meetings should be required.

After the staff is chosen come the questions of the sum of money to be invested and choice of printer and engraver. The next concern is how to raise the necessary money. The common sources of revenue for a high school annual are subscriptions from the organizations of the school, advertisements from the business men of the community and the sale of the book itself.

If the business manager and his assistants are wide awake, a considerable sum may be counted upon from advertisements. Advertisements should be obtained as soon in the fall as the senior class can organize for it, the earlier the better. Francis Joseph Reitz always had a faculty business manager working in conjunction with the business managers and advertising managers of the staff. A goal was set, the class was divided into squads, practically equal in number, and a captain was appointed for each squad. A list of advertisers of the preceding year was made and to this list were added others from whom any member of the class thought an insertion might be secured.

These prospects were divided among

It may be the football or basketball season to the rest of the school, but to the annual staff it is just so many weeks gone by and so few left to come before the leather-covered record of a year must be placed in the hands of classmates.

the squads and, whenever possible pupils were given prospects with whom they had some contact or influence. A careful check with the captain of each squad was made daily by the pupil advertising and business managers and the faculty business manager.

Early in the second semester the campaign to sell the books may be opened. Careful plans should be made to advertise the new features of the book in such a way as to aid in the sale. Just preceding and during the special solicitation days, posters may be used to create interest talks may be given in home rooms or at student meetings, publicity stunts may be arranged, a school assembly held, the book advertised in the school paper and perhaps, an "extra" issue published on it. Some scheme should be devised to stimulate interest.

The success of the book itself depends greatly upon its arrangement, which in turn depends to a great degree upon the theme. The theme should be decided upon as early in the year as possible. Every effort should be put forth to produce something unique and original; a difficult

^{*}The high schools in Evansville, Ind., no longer publish an annual. There are five high schools and one college in the city. Business men had too many demands for advertising. The board of education now finances the publication of a senior pamphlet for the members of the graduating class in each of the high schools.

task, I will admit. Still, with proper concentration, many clever devices can be hit upon and ideas found whereby the book can be made more attractive.

The photography, too, should be given careful consideration. Pictures are one of the main features of the book. One point to keep in mind, when planning the picture pages is that the larger the reproductions of group pictures, snapshots, campus scenes and individual photographs, the more "readable" and interesting they will be.

At Francis Joseph Reitz, the problem of getting pictures made was facilitated when the chosen local photographer set up a temporary studio in the school building where all pictures were taken. An extra charge was made if the pupil went to the studio down in the city. All proofs were delivered to the building at once with a time set for their return. In this way pictures were made with less delay and the results were just as good.

The artist who does the drawing, cartooning and designing should be kept supplied with work and should keep up with the progress of the book, for it is impossible for him to do good work in the rush of the last few days. If you do not have a good artist, your engravers can fill your wants in designing.

It is difficult to give advice to a future editor or business manager, because so many things have to be learned by actual experience. The editor should begin work the day he is elected and should not let up for one single moment until the book is on sale. The business manager cannot quit even then. Hard work, careful work, unremitting work, is the only thing that will carry through an annual.

The editor-in-chief, or whoever looks after the literary side of the book, should have a fiendish eye for detail and the smallest inaccuracy. The final reading and check on material should be made by the faculty sponsor to ensure correctness and the exclusion of objectionable material.

The dummy for the printer should be accurately arranged. All material should be typewritten, corrected and pasted, along with the cuts, in the proper places before it is sent to the printer. This will please him and you will be paid many fold for the extra work.

If the staff has lived up to the letter of its contract, it is safe to assume that the printer has lived up to his and that the books will be ready for distribution. System should be exercised in this as in everything else. At the time of the subscription campaign receipts should have been given purchasers with duplicates kept by those in charge, and these receipts should be presented by the purchasers to secure the book. It proved effective in the school mentioned to send to each home room on the day of distribution names of pupils receiving them, together with the books, and to let them be distributed in that way.

This article has attempted to touch upon some of the main points to be considered in publishing a high school annual. The staff should be carefully chosen. Those should be selected who will work in harmony with the general policy, for lack of harmony is like a vehicle with a loose, rattling spring, it may not impede the progress but it proves irritating to both the driver and occupants.

Money sources should be investigated early, leaving plenty of margin in the estimates for shrinkage. The editor should meet his staff frequently, cultivate the interest and acquaintance of his co-workers and see that all his copy gets to the printers and engravers on time. The distribution, if systematic, will be simple. A rigid account should be made of all expenses and credit and when the débris is all cleared away the school and staff will reap the rewards of a work well done.

Handicaps in Social Science

By EDGAR H. WHITNEY

The social science program is now handicapped because of a shortage in the number of adequately trained teachers. The normal trained teacher of a quarter century ago who has not kept abreast with the movements in education is unfit to function in a progressive school. College and university graduates of a generation ago who have had little or no training in methods or classroom procedures other than those used by their favorite professors are woefully inadequate for the task of handling a social program in secondary schools.

Some progressive educators think that every child should be permitted to choose his own activity unit of work. Others contend that a definite program of activity should be prescribed and that all children should be made to conform to the adopted units of work.

In my opinion both are wrong. To

follow the first plan results in hopeless confusion and antisocial reactions on the part of the children. Especially in the lower age-levels, to follow the second plan results in killing the enthusiasm of the child and destroying his initiative.

A more liberal attitude on the part of the public regarding the teacher of social problems must be attained. If the facts of history gleaned from authentic sources by masters in that field cannot be freely discussed by teacher and pupils, especially in the junior and senior high school groups, if the religions of the world cannot be read and compared, if enlightened intelligence cannot be brought into play in the evaluation of governments, men and measures, without incurring the wrath of prejudiced groups, it will be impossible for a social science curriculum worthy of the name to function in our public schools.

School District v. City

By M. M. CHAMBERS

ENERALLY, in American cities, the administration of the public school system is entrusted to a school district which has the legal status of a quasi corporation, entirely distinct and apart from the municipal corporation. Often the boundaries of the territories under the jurisdiction of the respective corporations coincide exactly; but sometimes they do not, and this circumstance serves to preserve and emphasize the fact that the two units are distinct corporate entities, though their constituencies may be largely the same.

Double Taxation

Usually the board of education, as governing body of the school district, possesses the power to levy taxes for the support of the public schools within the limits prescribed by the statutes of the state. When this is true, the persons and property in the city are subject to two overlapping local taxing authorities. This situation has more than once aroused alarm in the breasts of ardent devotees of parsimony and has lately come to be criticized and decried by a considerable number of political scientists,

On the other hand, some leading students of government as well as practically all school administrators and lay friends of education, contend that this arrangement is as it should be. It is generally conceded that the taxpayers get better value for their money in the case of the public schools than in any other department or division of local government activity.

Educators point to the corruption which is notoriously and admittedly rampant in the fiscal administration of many of our cities and raise a paean of thanks that the public schools are largely free of the whole mess, by virtue of a greater or lesser degree of fiscal independence. It may also be said with much truth that the administration of the schools is relatively free from the evils that attend political partisanship. This may be ascribed at least in some degree to the fact that they are controlled by quasi corporations distinct in legal character from municipal corporations or other local government units.

The purpose of the present article is not to elaborate the argument for and against the continuance of independent school corporations. Its purpose is to show some recent incidents which bear on the question, and which may be useful to the reader in formulating a philosophy of the subject upon which opinion regarding its various phases may later be based as occasion arises.

Public Utility Rates

Recently the highest court of the state of New York has found it necessary to pass upon a dispute concerning the rate of payment by the local school board for the school telephone service in the city of Elmira. The facts of the case are such that it was necessary for the court to explore to some extent the relationships between the school district and the municipal corporation, and to determine whether the school board is a department of the city government, within the meaning of a contract between the city and the telephone company executed in 1894.

In that year the city of Elmira granted a franchise to the New York Telephone Company, permitting it to place certain conduits under ground and stipulating that the company should furnish the city departments with telephone service at one-half the standard rates in the same locality. For the next thirty years the school board regularly paid half rates for telephone service and neither party to the contract questioned the arrangement.

In 1923, however, the telephone company gave notice that it did not regard itself as bound to accept half rates, and in 1924 the board of education agreed to pay full rates thereafter. Full rates were paid until 1930, when the board of education again raised the question and notified the telephone company that it would not pay anything in excess of the half rates provided for in the franchise of 1894. Later the company sued to recover full rates for the period from 1930 to 1932, and obtained a judgment for the full amount, which was affirmed on appeal by the appellate division, but reversed by the Court of Appeals.1

The decision dismisses the complaint and directs judgment in favor of the board of education upon its counterclaim for its alleged overpayments from 1924 to 1930, during which period it erroneously paid full rates.

Situation in Elmira

It is conceded that if the term "city departments" was defined apart from its historical setting in the present case there would be much force in the argument that the board of education is not within its scope. This is undoubtedly a correct generalization concerning the relations between school districts and municipal corporations in the state of New York

¹New York Telephone Company v. Board of Education of City of Elmira, 245 App. Div. 788, 281 N.Y.S. 411 (1935), reversed, 270 N.Y. 111, 200 N.E. 663 (1936).

today. However, the court points out that at the time the franchise of 1894 was granted by the city of Elmira, there was in existence only one branch of the city government having the designation of "department"—the police department.

Obviously neither party to the agreement intended that the half-rate telephone service should be restricted to this department. Instead, it was evidently the intention of the parties that all public services in the city should be beneficiaries of the agreement, an assumption greatly strengthened by the fact that for thirty years both parties interpreted the contract in accordance with it. Even in the negotiations preceding the change of 1924 it appears that the telephone company did not entirely disclaim being bound by the franchise, but expressly made its demand "except in event the educational system is maintained by the city from city funds."

Now it happens that the public schools in Elmira are actually supported by the city itself from city funds, because a special act of 1895 requires the council of the city to levy taxes annually in the conterminous school district, in such sums as are determined upon and certified by the board of education. Thus responsibility for raising the funds is upon the municipal corporation and not upon the school corporation.

Usually a Different Story

The board of education was not a party to the franchise agreement between the city and the telephone company, and hence had no power to rescind the agreement and enter into a new one, as it was alleged to have done in 1924. Therefore the telephone company had no right to retain the overpayments made between 1924 and 1930, for money paid under mistake by a municipal corporation may be recovered.

The foregoing case is an unusual one, in which the school district derives a financial benefit from its fiscal dependence upon the city. That the results of this dependence are often otherwise is demonstrated by other examples from New York State. Aroused by the glaring disadvantages of having the public schools of a city directly under the control of the municipal council, including even the appointment of the board of education, as was once the case in Buffalo and certain other cities, the legislature enacted statutes in 1917 and 1919 designed to remove the schools from local partisan control, and place their administration more largely in the hands of independent educational authorities.

A judge of the Court of Appeals once expressed the intent of these statutes in eloquent language: "The general purpose of these statutes is clear. Largely it was the intent that the state should reassume the power over education which it had hitherto given to the municipalities. By creating independent boards of education under its own authority it was thought that political entanglements might be avoided. It was believed a higher class of instruction would result by ensuring teachers at least a minimum salary, by giving their appointment in the question of increased compensation to its agents, and making their position permanent. All this was done. Those matters were left to the board."

In the same decision, however, the court went on to hold that city boards of education do not have unlimited power to determine the sums to be raised by taxation for their use, but that the city fiscal authorities may reduce the estimates of the board of education when it appears that other city services will suffer unduly if the demands of the school board are fully met.² This situation may arise, of course, as a result of the limitations of the total available revenues.

Investigations Needed

The constitution places a definite limit upon the amount which may be raised for "city purposes," and it has been judicially determined that the term "city purposes," as used in this clause, includes the purposes of the local board of education. Hence the city school districts in New York are by no means fiscally independent of the municipalities, though they may retain their separate existence as quasi corporations. Independence is a relative term, susceptible of existing in varying degrees. A study of the degrees of independence possessed by school districts which are conterminous with municipal corporations, covering a period of years, would disclose the trend in this disputed area of educational administration.

In Minneapolis and Chicago

Evidently New York State made important advances toward independence for city school districts in 1917 and 1919, but stopped far short of achieving for them the status which they enjoy in some other states. What have been the trends in New York and elsewhere during the past twenty years? No comprehensive report on this subject is available and no one can answer the query with final authority. Nevertheless we know that the movement for retrenchment in various forms has made at least temporary gains in nearly every locality. To what extent this movement has carried with it changes in the relationships between cities and city school districts ought to be investigated, for this may have important consequences for the welfare of public education for many years to come.

In 1933 it was found that the city charter of Minneapolis embraced two conflicting statutes, one authorizing the board of education to levy taxes for school purposes up to a limit of 22 mills on the dollar, and another authorizing the board of estimate and taxation to revise the tax rates fixed by the city council or any other city board or department. Hence a conflict arose when the board of estimate attempted to reduce the levy proposed by the board of education.

The supreme court, with two judges (Continued on page 34)

²Board of Education of the City of Buffalo v. Council of the City of Buffalo, 230 N.Y. 380, 130 N.E. 584 (1921).

³Board of Education of City of Rochester, v. Van Zandt, 119 Misc. 124, 195 N.Y.S. 297, affirmed 204 App. Div. 856, 197 N.Y.S. 899, affirmed 234 N.Y. 644, 138 N.E. 481 (1922).



Radio control room

HE honeymoon of radio is over," writes a large advertising concern. True it is that the radio is here to stay. Its form may change, its "listener level" may be elevated, but its novelty is gone. The educational value of the little tin horn may be argued pro and con, but the fact is that the progressive educator has become more "sound minded."

In the wake of this aroused interest came the installation of public address systems in the schools. Strange to say, some installations were made before their use was considered. The leading study in this field, made by D. C. Brockway, indicates that the total general use of the public address system per school averages 122.84 minutes per week. Perhaps there is some question as to the justification of a financial outlay for a device that is utilized only two hours a week.

In Ohio's Largest High School

West Technical High School in Cleveland with an enrollment of close to 5,000 has been developing the use of its public address system since it was installed in 1932. The administration in the Cleveland schools has always taken a keen interest in the auditory approach to learning, and this has encouraged the teachers. An enumeration of the uses to which the public address system is put at West

Hints for Hook-Ups

By WILLIAM B. LEVENSON

Tech may offer a suggestion or two to others interested in the utilization of this educational tool.

In a school as large as West Tech (Ohio's largest senior high school), the difficulty of presenting simultaneous announcements to the entire student body is often a perplexing one. In this sphere the value of a public address system is unquestioned. The task of homeroom teachers in many schools, sad to relate, is seldom more than the mere recital of routine announcements. With an address system the responsibility shifts from the teacher to the pupil. Once an announcement is made, the directions are his to follow. No longer can he claim, "but Miss Adams didn't tell us that."

Of course if the system were used only for announcements, its purchase would hardly be justified. At West Tech a valuable phase of the morning homeroom period is the daily news summary. The more important news items only are presented. Often these assume a dramatic form, styled after the popular "March of Time" radio program.

Supplementing News Broadcasts

However, as every successful teacher of current events knows, merely to snatch the news here and there is inadequate. Some continuity, some causal relationships must be suggested. The social study department, aware of this deficiency, has instituted the following procedure to supplement the daily news broadcasts.

Every Wednesday a fifteen-minute broadcast of a current subject is presented to the social study classes. These broadcasts are prepared by the various members of the social study department and they assume the form of a "master lesson." They involve specialized research and illustrative materials such as maps, charts and readings. They suggest procedures for follow-up discussion. Not only are they fairly complete in content, but often they take on the form of a dramatization, dialogue or narrative. Scholarship plus showmanship is the goal.

Each teacher is notified early in the term just when his "lesson" is due. Thus he is given time to develop the content of his contribution. The subject is of his own choosing.

"Ask Me Another" Contest

Good teaching involves an element of testing, of drill. Even when teaching by means of a public address system this is true. In order to motivate, to test and to review the current event material presented, an "Ask Me Another" contest has been developed at West Tech. Periodically, brief tests covering the material presented in the morning news flashes are presented.

The various homeroom secretaries who grade the papers, keep a record of the current event leaders in each homeroom. By elimination and through the use of the old-fashioned "spell down" for which was substituted a "question down," the West Tech Current Event Champion was chosen. The values of such a procedure as a form of motivation are evident.

The homeroom period is more than a clerical session and roll call; yes, even more than a news broadcast. On Thursday the length of the homeroom is extended. Homeroom programs are planned in advance by a committee of teachers. Occasionally outstanding speakers are brought to the school.

The West Tech auditorium can accommodate only one-fourth of its large student body. Does that mean that three-fourths of the school will not receive the values of the address? Not at all. The PAS hook-up brings the speaker's voice into every homeroom. Whether it is a musical program, a radio play or a holiday celebration, the address system is utilized to a maximum degree.

If a certain homeroom would rather not listen, but plan its own program instead, it is encouraged to do so. Alternating the homeroom attendance in the auditorium makes possible both the sight and sound of a homeroom program.

West Tech has developed a course entitled "Radio English." The class grew out of the need for trained speakers to serve as announcers. A limited number of eleventh and twelfth grade pupils are permitted to enter the course following an elimination tryout.

The pupil is given drill in voice and diction and in the various phases of radio writing. Straight announcements, advertising continuity, news reports, the adaptation of one-act plays and short stories, and the writing of one original radio play are a part of the writing requirements.

The course, although arranged particularly with the radio in mind, obviously benefits the pupil for some other line of work in which he may later enter, training him to express himself well both orally and in the written form.

In athletic contests, the loudspeakers are, of course, utilized. In track and football, improved announcement facilities increase the spectator's enjoyment. At school dances and parties the use of amplified recordings suggests a method of economy. Often a small group cannot afford an orchestra.

Of course the utilization of a public address system such as is described in this article requires an organization of personnel. One teacher of the electrical department is in technical control of the system, its

maintenance and operation. Another instructor with some radio experience is placed in charge of the programs. It is his duty to develop the news broadcasts, arrange for all rehearsals and check on all announcements.

A valuable by-product of this adaddress system utilization is the
training it gives to the pupils. A
staff of announcers is trained, most
of them pupils selected from the
Radio English class. This group of
announcers handles the morning's
news and announcements. During
the Wednesday "master lessons,"
other pupils participate. They are
largely selected and trained by the
teacher producing the lesson. The aim
is for more participation.

Working side by side with the announcer is a corps of operators selected from the electrical classes. A schedule is developed by which each operator knows just when he is in charge of the panel. One of these boys, as a result of his interest, is in charge of the sound effects used on these broadcasts.



The West Tech hook-up brings auditorium programs into every homeroom.

Second Call for Pupils

Giving Illiterates Another Chance

ORK among adult illiterates has been carried on long enough in many communities for methods of organization and instruction now to be evaluated.

Although there are in the United States at least 12,000,000 men and women who, according to government reports, are not functionally literate, one of the chief problems throughout this work has been the difficulty of locating pupils. Many illiterates do not want anyone to know that they cannot read nor write. One woman, for example, dressed well, made a neat appearance, spoke English as well as her associates, and even her husband did not know that she could not read. He was literate. and it was under greatest secrecy that this woman allowed the adult teacher to visit her.

Surveying the Community

An educational survey of a community, even though it may not reveal all illiterates, is a great help to adult workers. The worker making the survey should not be content with finding out how far the person went in school, for a grade can easily grow higher, but should ascertain the degree of functioning literacy whenever there is any doubt. If a survey has not been made the teacher will find the following agencies or persons helpful in locating illiterates: army workers; bankers who have to endorse checks; grocery men, especially those serving people on direct relief; doctors and nurses, including the county nurse; local politicians who know all the voters; county officials; policemen and jailers; parentteacher associations, and truant officers.

After a list of illiterates has been procured the teacher through personal calls and careful study of the individual, can determine the educational level of each student and make the first forward step relative to his immediate interests. A group of adult teachers working in both rural and urban sections of Kentucky compiled the following list of appeals that have proved effective:

A desire to be able to write their names; to read about the soldier's bonus; to read about old age pensions; to read and understand the Bible; to read words of songs they love; to help their children with school work; to read directions on a dress pattern; to sign relief orders and cards; to make out postal orders; to read recipes and cook books; to read road signs and directions; to read and sign crop contracts; to read weather reports; to read sale bills and get bargains; to read street numbers and addresses; to read motion picture signs; to read directions for taking medicine; to read directions for planting garden seeds; to read names in phone books; to make out grocery lists; to make out work cards and get promoted; to make change; to sign children's report cards; to make out weights and measures.

Relating Learning to Life

From this list of incentives it is easy to see how learning can be related to life situations. Housewives take real pleasure in being able to label their fruit, their cans for coffee, sugar, salt, pepper and flour. In homes that do not have canisters, sacks or boxes may be labeled, or word recognition may be taught from printed material used daily.

For the teacher to read sewing or handwork directions with the illiter-

By FRANCES ROSS HICKS

ate and teach her to read them unites learning with doing. Throughout the teaching period the work should be related to the learner's interests and the immediate situation should determine simple projects.

Work in arithmetic, spelling, writing and reading can be combined in these immediate interest projects. Since reading is basic, much time should be spent in this field. Likewise, since experiments have shown that the short sentence method is superior to the word method in teaching beginning reading, this method should be used. Illiterates might as well form good eye habits from the beginning of their reading experience.

"We Raise Ducks"

One teacher found that a rural illiterate woman learned many words in the first lesson by sentence repetition, such as: We raise chickens, We raise ducks, We raise turkeys, We raise flowers, We raise corn. A worker in a CCC camp centered his first reading lesson around baseball which at the time was the major interest of his group of twenty-two boys. He used short sentences as: We are playing baseball. Nine men are playing baseball. The men are on the field. Jack made a home-run. Rather difficult words were mastered easily by relating the sentences to this interest.

Occasionally a check should be made on the number of words each pupil can recognize. This enables the illiterate to note progress and serves as incentive for further endeavor. Word study naturally follows the short sentence method.

At this time special emphasis

should be given to essential words and phrases. The following list was prepared by a group of adult teachers who had worked with illiterates: danger; poison; exit; caution; free; fresh paint; hotel; keep off the grass; do not park here; no trespassing; posted; help wanted; bargain; detour; side road; closed; private; for fire only; men working; stop, look, listen; eats; rest room; cabins; no admittance; slow; condemned; ice water; for rent; for sale; quarantine; tickets; information; no left turn; push; pull, and days of the week.

The word "hotel" was stressed by one teacher because an illiterate pupil had told her of his difficulty in finding a place to sleep when in a strange town. The list will be extended in the light of the individual's need, yet the foregoing terms seem essential in the majority of situations.* As sentences, phrases and words are recognized, the letters can be learned and the work of reading correlated with spelling.

Although emphasis should be placed on interest there will be times when drill on confusing words such as every, very, than, then and the like must be given. If this drill grows out of a recognition of need it should be satisfying to the learner and lead to deepened interest. Simple tests enable the student to note his progress and serve as incentives for greater efforts. Difficult tests should be avoided, especially in the early part of the work.

Much ungraded material should be used with illiterates. Primers may be used with those who take pride in their books and have a desire to excel their children. The illiterate's attitude toward childlike material should determine the selection of reading material entirely. If material from these books is needed, pages could be torn out for use in certain lessons.

Newspapers, magazines, mail order catalogues, government bulletins, advertising and free material from vari-

ous companies can be utilized by the teacher of adults. As the student advances, pride in the possession of books can be fostered. Until the teacher knows the individual pupil, however, it is better not to take a book labeled "Primer" to the lesson hour. Only the most mentally retarded illiterates are insensitive to their condition.

Experience among both urban and rural teachers has shown that the individual method of instruction with the teacher going to the home is much more satisfactory than attempting class work. Only in camps, jails, prisons, county homes and institutions where several illiterates would be found is classwork advisable.

Illiterates find it embarrassing to go to a class for "illiterates"; many do not have the proper clothes to wear to school, and various other atti-

tudes hinder. In the home the teacher has an opportunity to teach much besides reading, writing, number work and spelling. Many teachers give instruction in home-making, in economical purchasing and preparation of foods, in hygiene and sanitation and in sewing. Although the chief objective is reading, an interesting teacher leaves no needy phase of life untouched.

It is a noble work, this giving of the tools of learning to everyone whose mind is capable of acquiring them. It is doubly noble when one considers that much of this work is a second opportunity given to those who rejected the first offer available through the public schools. If a thorough study is made of the causes responsible for present day adult illiteracy, this second offer should be unnecessary for the next generation.

School District v. City, Cont.

(Continued from page 30)

dissenting, resolved the conflict in favor of the board of education, and held that no other city authority had any control over the tax levy for public education so long as it did not exceed the 22-mill limit. This decision was based on grounds of state policy, well expressed in the following words of the court: "To place the duty to provide education in one board and power in another which has no such duty to prevent its performance runs contrary to the policy with regard to education as expressed in the decisions of this court."4

In Chicago the relationship between the city and the school district became an issue in 1934, when the board of education proposed to issue bonds to furnish a working cash fund, as authorized by a state statute. The municipal authorities sought to forestall the bond issue on the ground that the city was already bonded beyond the constitutional limit of its indebtedness. This contention was obviously of no weight, because the city school district is a separate corporation entirely distinct from the municipal corporation, and possessing power to issue its own bonds up to the constitutional limit provided.

This situation dates from a statute of 1917 which removed the function of public education from the city corporation and created the school corporation to exercise it. The two corporations are separate, and it is of no consequence that the city treasurer happens to be ex officio treasurer of the board of education and that the territorial boundaries of the two corporations exactly coincide.5

There was also precedent for this decision in an earlier case wherein school bonds to provide the working cash fund authorized by statute were held to be obligations of the board of education, and not obligations of the city.6

^{*}See also Whipple, C. A., et al: Manual for Teachers of Adult Elementary Students, U. S. Off. Education, Washington, D. C., p. 38.

⁴State ex rel Board of Education of City of Minneapolis v. Erickson, County Auditor, 190 Minn. 216, 251 N.W. 519 (1933).

⁵Board of Education of City of Chicago v. pham, City Comptroller, 357 Ill. 263, 191 N.E. Upham, City Comptroller, 357 Ill. 263, 191 N.E. 876 (1934).
"Mathews v. City of Chicago, 342 Ill. 120, 174 N.E. 35 (1930).

Selecting Our Teachers-to-Be

By OSCAR E. HERTZBERG

York State Teachers College at Buffalo has been committed to the principle of selective admissions. Lately the state normal schools have also adopted this principle, and there are at present minimum standards for admission in all the state supported teacher training institutions.

This program has developed in spite of the concept, basic in all our thinking concerning state supported schools, that the privileges of education belong to all who apply for them. Today serious questions are being raised not so much as to the importance of expenditures for education but as to whether these great sums of public money are being spent wisely and well. Especially is this true of education beyond the high school.

Selective admission of students to institutions of higher learning, and especially to institutions giving training in the established and honored professions, is not entirely a new procedure. Colleges of engineering. law and medicine, not to mention our great military academies, have probably gone the farthest in this direction. Of the training given by these professional schools, medicine, because of its social and human significance, has perhaps been subject to the most stringent state supervision. Certainly teachers, who devote their lives to the training of the future generations, should also be among the carefully selected guardians of the state. Who will say we are not witnessing today a confirmation of the oracle in Plato's "Republic" "that the State shall be destroyed when its guardians are iron and brass"?

While the details of the program for selecting students for the New York State teacher training institutions have changed each year, especially with reference to the particular tests used, the general program has Setting up an admissions program for those who wish to become teachers is an extremely delicate matter for a training institution, because it must include the measuring of potential human ability. All state supported schools in New York now have minimum standards for admissions. How the principle of selective admissions has been applied at the State Teachers College, Buffalo, is described in this article.

consistently operated along three lines: (1) a set minimum high school scholarship average as a requirement for application, (2) the subjection of all applicants to competitive matriculation examinations, and (3) a perusal of the personal qualifications of the applicants. Following is a description of the program as it operated to select the 1933 freshman class at the State Teachers College at Buffalo.

The first requirement, which was set up for application, was a minimum high school scholarship average of 77, which is twelve points above the minimum average required for high school graduation. Two questions may well be raised concerning the use of high school averages as one standard for admission to a teacher training institution: (1) Are a student's high school grades indicative of his potential academic ability in college? (2) Is academc ability related to successful teaching?

In answer to the first question, while there may be outstanding exceptions to the rule, it is generally conceded that in most cases a student's academic ability in college can be well prophesied by his high school achievement. Many correlation studies could be quoted to verify this general contention.

Concerning the second question, the answer is not so obvious. Most of the studies that have been made to date for the purpose of predicting teaching success are unique in one particular — the low correlations that are found between such measures as scholarship, on the one hand, and teaching success on the other. The difficulty, however, seems to lie in agreeing upon what is successful teaching. Until we have definite evidence to the contrary, common sense leads us to accept the premise that scholarship is intimately related to successful teaching, especially today when so much more is required of a teacher than a knowledge of simple subject matter.

The second part of our program, that concerned with competitive matriculation examinations, was instigated to supplement the high school scholarship record. Every applicant was required to take three tests: a general intelligence test, a prognostic test of teaching ability, and the English test.

Since our partial selection of students was made upon the basis of no one of the foregoing measures but upon a combination of all of them, our procedure was to combine them into a composite percentile rank. This rank was made the primary basis for selection.

Personal Interview Required

The third part of our program had to do with the selection of students on the basis of their nonintellectual and nonacademic qualities. The applicant was required (1) to submit with his formal application a record of a physical examination given by a reputable physician on blanks provided by the state department of education; (2) to have a confidential report blank, also provided by the state department, filled out by his high school principal and returned directly to the registrar of the college, and (3) to appear at a set time for a personal interview in order that a check could be made on such personality factors as language handicaps and excessive physical and personality defects.

The results obtained on these last three factors modified the composite percentile rank and sometimes were the determining factors concerning whether or not the student would be admitted to the college.

The results of this program as it has operated all over the state have been brought together and analyzed in mimeographed reports. The present space permits only the most casual comments with reference to the situation at Buffalo. The data were analyzed from two points of view: a comparison of the 1933 freshman class with those of the preceding years, and a comparison of the candidates admitted in 1933 with those rejected for the same year.

The following figures give some specific comparisons. On high scholarship average, the median of the 1930 admitted class was 80.68. For the 1933 group it had increased to 84.3. This increase was undoubtedly partly due to the fact that the high school scholarship average set for application had been raised from 75 in 1930 to 77 in 1933. The median for the rejected group in 1933 was 80.5, which is almost the same median as that of the admitted group in 1930.

While the intelligence tests that were given to the earlier groups were not in the same form as those given to the 1932 and the 1933 groups, it was obvious to us that, along with high school scholarship averages, the general intelligence of the groups had risen each year. In 1932 the median for the admitted group in intelligence (as measured by the Ohio State University Psychological Test, Form 15) was 162 and in 1933 it was 167. These figures compare well with the test norm of 127. The median for the rejected group in 1933 was 147.

The Coxe-Orleans Prognostic Test for Teaching Ability was used for the first time in 1933 so no comparisons can be made with preceding years. However, the median for the admitted group in 1933 was 285 and for the rejected group 261. Also for English a different test was used in 1933 than for the preceding years. However, for 1933 the medians on the English test for the admitted and rejected groups were 112 and 102 respectively.

Technique Working Well

The significant feature of the foregoing figures is not so much that they show a steady improvement from year to year in the quality of our students (for that is a process that must inevitably reach a limit) but that they show a clear distinction in ability between the candidates who have been elected into our college and those who were rejected.

The foregoing comparisons are sketchy but they indicate that, as far as objective measures may be credited, our technique of selection has operated to accomplish the purpose of definitely increasing the quality of our student body. Critics of this type of procedure are prone to point out and to magnify the significance of cases of individual injustice. This is perhaps only natural as an exceptional injustice always commands dramatic notice.

We do not maintain that our system or any system of selective admissions can operate perfectly, but since all of our institutions are on a quota as to the number of teachers they may train, we believe that on the principle of the greatest good to the greatest number we should select the most desirable material that comes to us. Moreover, we realize that we have by no means exhausted the measures and methods that might be employed in admissions work. However, the measuring of potential human ability in any field is an extremely delicate matter, and for that reason we have been careful to apply only the most conventional and accepted of measuring instruments.

Views on Personality Tests

The whole field of the testing or judging of student personality and of its relationship to successful teaching needs to be developed and incorporated more extensively into our program. To date, this has been accomplished only through the personal interview, which has been used to eliminate applicants who possessed personality defects to a marked and incurable degree. Our present point of view is that, in setting up an admissions program, we should be careful not to rely too much upon tests for the diagnosing of personality. Individuality, after all, is an elusive thing and we certainly do not want our teachers all cut to a pattern. Insofar as gross physical defects are concerned and personality maladjustments to the extent that the candidate shows need of psychiatric care, the admissions program should eliminate. But for the great majority of students, highly qualified from the academic angle, we feel that we should consider the development of a desirable personality as an intricate part of our entire training program.

The Job of Classroom Supervisor

By J. C. WERNER

Classroom supervision. Recently there has been a tendency to eliminate many subject supervisors, thereby effecting a financial saving in budgets, which have been extremely difficult to balance during these depression years. In many smaller districts all supervision must be carried on by the administrative head of the school system. Not infrequently the major portion of his time is devoted to the business phase of the operation of the schools.

There seems to be a unanimity of opinion that the real purpose of all supervision has as its goal the improvement of classroom instruction. Such agreement does not continue, however, when the methods to be used in a supervisory program are discussed.

In the discussion of the school supervisory program two phases should receive consideration, namely, how shall the program be carried out, and how is such a program likely to be received by teachers?

The improvement of classroom instruction is a problem of teacher training, training in service, and supplements the preservice training. In preservice training use is made of the observation of teaching. The visiting day for the teacher in service is a continuation of this practice.

Visiting Day for Teachers

The best results are likely to be secured from such visitation if the supervisor, through classroom visitation, has analyzed the weaknesses of the teacher and then sends her to visit classrooms where more efficient teaching procedures may be observed. In



The real purpose of supervision is to improve classroom instruction.

fact it is desirable to place in the hands of the visiting teacher a carefully planned check list of points to be observed during the actual visit. In some cases it may be advisable to make suggestions to the teachers who are to be visited in order that specific types of teaching may be observed by the visitor.

A visiting day for each new teacher has been the practice in our district for several years. During a period of seven years a training center from Slippery Rock State Teachers College was maintained in the elementary grades. By using student teachers all elementary teachers were given visiting days. Best results, however, were secured when intra-system visiting was used.

Such a system of visitation, in part, takes the place of demonstration teaching. The teachers, in my district at least, do not consider such teaching as demonstration teaching and a much more natural condition prevails in the classroom. When visits are made to other districts the

teacher who has a visiting day reports to other teachers of her grade concerning the work observed. In such reports the names of teachers and districts visited are not revealed.

Supervisory Visits

It will be noted that classroom visitation plays an important part in the preparation for visiting days within the system. This leads to the problem of classroom supervision. Several questions arise. Should supervisory visits be announced? Should visits be made on successive days? What should be the length of the visits? Should notes be taken during visits? Should check lists be used? Should the teacher receive a duplicate copy of the check list if one is used?

These questions will be discussed in keeping with practices in my district.

Visits are unannounced in nearly all cases. This practice is followed in order to have an opportunity to observe classroom procedures in what is probably the normal condition. The district is visited by a member of the county superintendent's staff and the approaching visit of this official in many cases places some teachers under a decided nervous tension. With the practice of unannounced visits such a condition is avoided. In some instances, when conditions warrant, the teacher is told that a visit will be made at a certain time to check on the progress of certain phases of the work. The announced visit has the advantage of allowing the teacher an opportunity to be seen at her best.

The answer to the question, "Should visits be made on successive days?" depends entirely upon the supervisor. If he is concerned with the careful development of some experimental work, daily contact with such work may be essential. Again a teacher may be having difficulty with certain types of work and daily observation may be desirable.

A comparison of teacher-pupil reaction is also possible by following one group in a departmental organization through a day's schedule. Sometimes a visit reveals poor pupil preparation of definitely assigned work. Visiting the class the next day may reveal that the teacher seemed to have forgotten that assignments supplementing the text, although definitely made on the preceding day, were not mentioned. Such a condition frequently explains the lack of preparation of all assigned work. Occasionally a teacher is visited who offers excuses for the type of recitation just observed. It may be advisable to visit on successive days, unannounced of course, to see how long the excuses will continue.

Length of Visits

What should be the length of the visits? There is no definite answer to this question. The visit should be long enough to permit the presentation of a complete subject recitation. When time assignments are comparatively short a visit covering more than one such presentation is desirable. When only a limited time is

available the purpose of the visit will determine the time of visit. If routine procedure and classroom management are to be observed, a few minutes at intermission or dismissal time will be valuable. If ability to present new material is to be observed, then the visit should be made during the time of the assignment.

Should notes be taken during the visits? Diversity of opinion exists with respect to this question. Some contend that the presence of the supervisor is a disturbing element with beginning teachers and that this disturbing influence is magnified by the compilation of notes. There may be some validity to the foregoing argument upon the occasion of the first visit, but if the proper relationship exists between the teacher and supervisor the taking of notes will not disturb the teacher, especially if the teacher ultimately has an opportunity of seeing the notes.

How About Check Lists?

Should check lists be used and should the teacher receive a duplicate copy of such a check list?

Teaching is a complicated procedure. Anderson, Barr and Bush have shown the need for a careful analysis of the teaching process. Yoakam and Simpson have worked out a careful analysis of teaching techniques to be used by student teachers in their observation of classroom teaching. In view of this generally accepted fact it is entirely justifiable to defend the use of check lists.

When a visit is made without a check list there is no real assurance that attention will be directed to many of the complicated phases of classroom technique. With the use of a check list there is definite assurance that the items included on the check list will be given attention. True the check list may not be complete and may omit many essential phases of teaching procedure. This is especially true with respect to the evaluation of the teacher's personality and influence upon her pupils.

Various check lists are available.

Some of them attempt to make use of the rating scale idea in their use. Check lists and rating scales, in my judgment, should not be combined.

Our present form is so arranged that a duplicate copy is available and may be placed in the hands of the teacher at the end of the visit or later. This record of the visit furnishes an excellent basis for a conference with the teacher at a later date, if such a conference is advisable. In the form referred to, one side of the sheet provides for the notation of facts concerning the time and place of visit, the subject or subjects observed, the size of class and the procedure followed by the teacher. The other side has a check list with each item numbered. By using these numbers a record of the commendable observations as well as those that should be improved is recorded on the face of the form. The duplicate is available by using carbon paper. For convenience the original and duplicate copies are in different colors. The original is given to the teacher.*

What is the teacher's attitude toward this type of supervision? Teachers in many districts welcomed the opportunity of having a visiting day and after the first year there was no reaction to intra-system visitation. All elementary teachers are given a day to visit other teachers of their grade early in their first semester.

No Resentment From Teachers

Likewise, teachers welcome the receipt of the supervisor's notes on visits. After the first visit there is apparently no evidence of the teacher reacting unfavorably to the use of the check list. The fear of note-taking seems to disappear when the teacher knows that a copy of the notes made will be available at the end of the visit. Not infrequently if a short visit is made without the check list teachers will ask why it was not used. Such a reaction seems to indicate that teachers welcome rather than resent this type of supervision.

^{*}Copies of these forms may be obtained upon request to the author.

Superintendent, Go South



New Orleans skyline

EW ORLEANS is making elaborate preparations for the entertainment of the sixty-seventh annual convention of the Department of Superintendence, February 20-25. Supt. Nicholas Bauer has enlisted more than 300 leading citizens of the city for service on convention committees. Among the features under consideration may be mentioned a special Sunday evening Dixie program and, later in the week, a children's carnival parade.

This parade of the Krewe of NOR, which tells the tale of New Orleans Romance, will be put on the streets by a carnival organization made up of children of the public and parochial schools. Consisting of fifty or more floats, the parade is an annual feature of the Mardi Gras, and will be reproduced especially for the Department of Superintendence.

One of the most important duties of the executive committee of the Department of Superintendence is to select the place for holding the annual convention. The requirements for a convention city are not easily met. At St. Louis last February, 9,909 persons registered officially. The housing bureau handled 3,984 sleeping room reservations. A large proportion of the accommodations thus

assigned were for occupancy by two or more persons. Many visitors found accommodations through the aid of friends and were not cardindexed by the housing bureau.

Eleven general sessions were held in the St. Louis municipal auditorium, with attendance ranging from 2,400 on Thursday afternoon to 10,700 on Tuesday evening. The Department of Superintendence itself held seventy-five afternoon group meetings. Other organizations had approximately 150 meetings. The official program listed ninety-four breakfasts, luncheons and dinners.

Few cities have the meeting hall and hotel facilities to entertain the winter meeting, and so it has been necessary for the executive committee to return frequently to cities having the necessary accommodations. However, the Department of Superintendence is a national organization and, as such, it is under obligation to visit various parts of the United States, as opportunity presents itself. For many years, members have urged the desirability of holding a convention at New Orleans. Usually this is impossible because the dates of the Mardi Gras are coincident with those of the Department of Superintend-

By A. L. THRELKELD

In 1937, the Mardi Gras festivities will be concluded on Tuesday, February 9, a situation that will not again exist for many years to come. In presenting the invitation of New Orleans, Superintendent Bauer had the support of practically every state and city superintendent in the South. A decade ago, President Randall J. Condon presided over a convention, long to be remembered, at Dallas. Since then, no meeting has been held in a Southern city.

New Orleans has one of the newest and finest municipal auditoriums in America. The main assembly hall has seating capacity for 7,500 persons. A smaller assembly hall will accommodate an audience of 3,000. Numerous committee rooms are available for small group meetings. The auditorium also has space for about 250 conveniently located exhibit booths. This \$2,000,000 building, overlooking Beauregard Square, is within easy walking distance of the principal hotels.

Advance requests for convention reservations at New Orleans have been more numerous than for many years past. All of the downtown hotels have been reserved to capacity, but under the direction of Superintendent Bauer and a group of nearly 100 New Orleans principals and teachers, ample accommodations in private residences have been secured. Requests for reservations should be addressed to Sam Fowlkes, chairman, Housing Bureau, Department of Superintendence, N.E.A., Association of Commerce, New Orleans.

Happy to Say

By WILLIAM McANDREW

THIS time the bouquet goes to John Studebaker. Here is a schoolmaster unspoiled by high place who ought, according to all the rules of safety, to steer clear of reference to schools meddling with dangerous political dynamite, but who, early and late, slaps legislatures in the face for their outrageous measures which cripple the public schools as promoters of fundamental ideals. There should be a Society of Studebaker Supporters.

FROM the earliest times, sages have taught the power of cheer or of low spirits to make or break your energy and success. Nobody knows how accurately they counted cases to justify their teaching. But we are living in the age of science, now, when the work of Cannon, Cushing, Crile and the Mayos in medical laboratories has put the cheery old boys of the long ago into the class of the twice two's are four's. You can now take Solomon as confirmed by science when he says a merry heart doeth good like a medicine but a broken spirit drieth the bones. You can now make clear to your teachers that their marking children down, their keeping laggards after school, their other negative devices, do not advance learning at all but hinder it. Experiment and measurement have proved that the way to get children or grown-ups to succeed is to center on success, not on failure. Somewhere the dullest does something worth praising. Nurse it, build on it. Succeed with children or give way to someone who will.

THE tendency of a staff to give a name of its own to the administrator is exasperating when it chooses some naughty title like "Dr. Fusser," "Gumshoe," "Mr. Maybe," or contemptible handles like these. When the warning goes around, "His Pomposity is in the building," you have reason to be mad (or sad). Workers seem prone to avoid calling you "Mister" whatever your name is. They will cut your title to "The Supe," which neither sounds pretty nor is intended to be so. But when your people speak of you as "Uncle Frank" or "Brother Bob" or "Daddy" or even "Pop," you may rejoice. Your parents christened you first, but you make your own nickname.

WHEN you hear some clear-headed speaker give an audience of teachers a simple, interesting talk on how the work they are doing can be made to satisfy them with better results, you may feel discouraged that so many studious boneheads continue to bore an audience with abstractions as sapless as plants of last year's botany lessons. Cameron's scheme for appraising speakers for the Michigan Education Association will help you a lot. Give each auditor, on entering, a printed form:

Mail a few of them, filled out, to your dry-as-dusts and you'll do them and the world good.

R. MARK SULLIVAN, I have just read your "Special to the Times," entitled "Move Toward New Society Seen in Educational Field."

Because you did give a generous interpretation of American education in "Our Times," and because you wield a large influence in shaping public opinion, I question your treatment of the report of the Commission on Social Studies.

You failed to read the report; yet you are fearful of the influence of the commission. If you would really examine the report, you might find material for an article that would appeal to the reason rather than the fear of your readers.

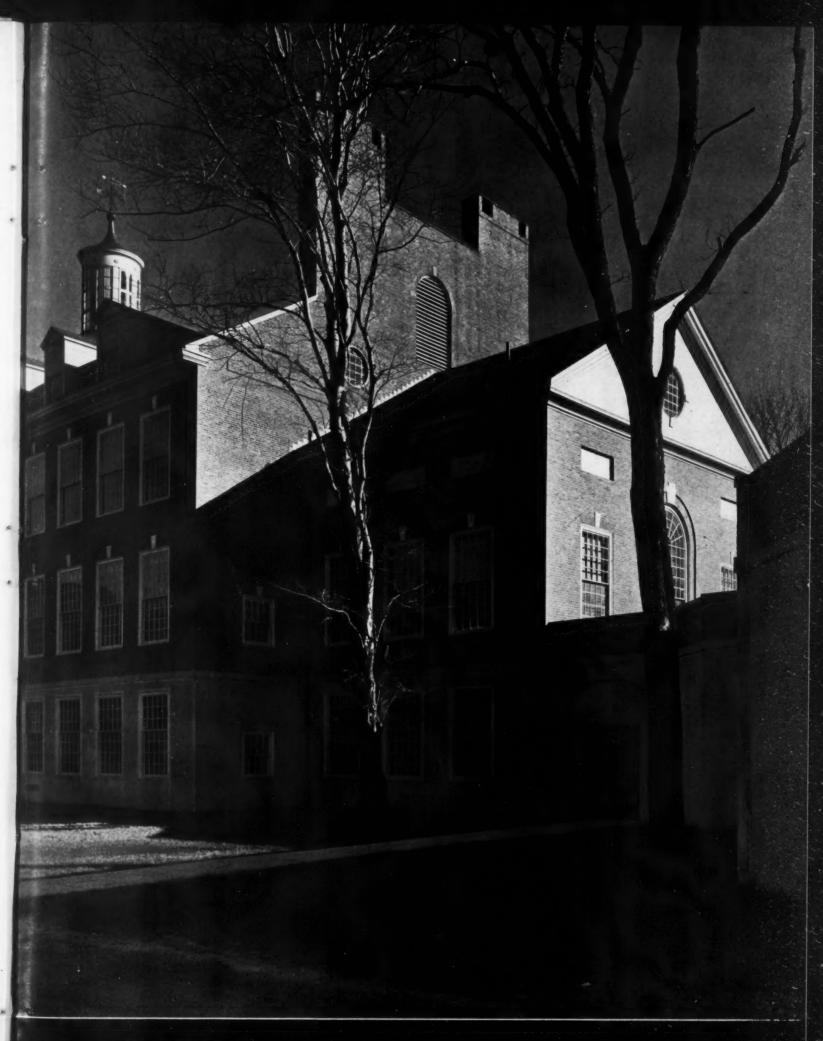
You propose "a conception of teaching which is confined to the imparting of facts and truth." What facts? What truth? To illustrate, let us recall the bank failures of the last administration or the mounting federal debts of the present! What is the truth concerning these two sets of facts?

You imply that there is something wrong in teachers' attempting "to give thought to the world outside the college campus." Prior to 1930 the one criticism most frequently leveled at teachers was that they knew nothing of the world outside. The experiences of the last six years have forced teachers to look at some "facts" outside the school and college. What is the "truth" concerning them? Would you deny teachers the right to seek the truth or to publish their understanding of it?

You "assume the ideas of these leaders must be spreading far and deep into public schools through the country." I hope you are right: because one of their ideas is that children shall learn the facts and that each for himself shall seek the truth. Randolph of Roanoke once said he would go out of his way any time to kick a sheep. Perhaps another idea of this commission is to develop a generation that will not be herd minded.

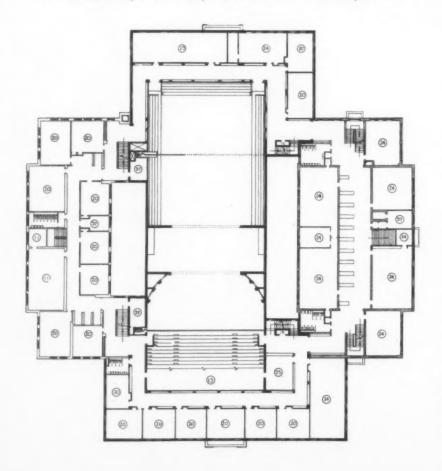
Let us appeal to reason not to fear.

—J. CAYCE MORRISON.



THE SCHOOL PLANT

Plans of first and second floors of Sioux Falls High School—14, cafeteria; 17, auditorium; 18, stage; 19, gymnasium; 20, classrooms; 22, shops; 23, study hall; 24, commercial department.



This Million

By ROBERT A. PERKINS

THE new million dollar high school for Sioux Falls, S. D., was dedicated on Labor Day of last year. It contains many unique and interesting features and is outstanding for value obtained for the money expended.

Of fireproof construction and exterior walls of stone, here is a school of 3,800 normal pupil capacity, with completely equipped classrooms, auditorium, stage and gymnasium, built at a cost of only 28 cents per cubic foot.

Fifteen years ago the first unit of the new structure was started. This was entirely detached from the original building constructed in 1908, except for the service tunnels connecting the new heating plant with the new and old units.

In designing the second unit the architects held to the floor levels of the original building. They also followed the general architectural treatment so that window and cornice lines could be followed through when a central unit should be built connecting the two detached portions.

The cost of this unit including the new heating plant was as follows: general construction, \$250,142.85; mechanical, \$84,209.15; electrical, \$9,678; architect's fee, \$13,697; total, \$357,727.

The central unit was completed under the Public Works Administration authority and is of fireproof construction similar to that of the building erected in 1921. The cost of construction was: general construction, \$545,377.85; mechanical, \$60,925.36; electrical, \$41,800.48; architects' fee, \$31,773.26; total, \$679,876.95.

Went a Long Way

The cost of the two modern units is therefore \$1,037,603.95, or approximately 28 cents per cubic foot.

In the near future the plans approved by the board of education call for the modernization and fireproofing of the original unit, and when that is done the three-story building will cover an entire city block.

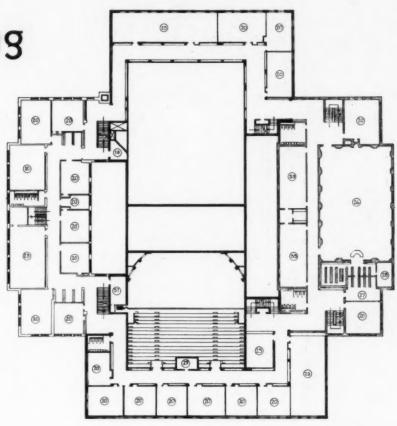
The exterior walls are of quartzite, in tones of rose tinged with blue and brown, making a rich variation in texture. The cornice, balustrade, sills and exterior molded courses generally are of terra cotta in a similar color range.

The exterior doors, frames and lighting fixtures are of the hollow metal type in verdantique. The window frames and sash are of wood, metal weatherstripped and calked.

The roof is a twenty-year bonded tarred felt and pitch type. This is laid on a concrete slab except over the auditorium and gymnasium where metal deck construction is used. The entire roof area is thoroughly insulated. Skylights in the auditorium sections are over the balcony area only. These may be darkened by motor operated shades from the projection room.

In the interior the wood trim is of oak. The first floor corridors and stairways to the second floor are provided with a booked marble wainscot and border. All the stairs and corridor floors are of terrazzo. The upper floor corridors are wainscoted locker high with tile. Ornamental plaster cornice is provided in all the corridors, vestibules and public spaces.

The plan of the new unit is unique in several respects. The auditorium, with a seating capacity of 1,800, is so



Third and fourth floor plans—20, classrooms; 26, library; 30, band room; 31, instrument room; 33, art department; 34, music room; 35, drafting room; 40 and 41, chemistry and physics laboratories.





Exterior walls of the Sioux Falls High School are of rose quartzite, tinged with blue and brown.

arranged that the balcony portion may be shut off by means of electrically operated doors. When these are closed, the room, which is seated with tablet armchairs, becomes a study hall accommodating 700 pupils. This auditorim is provided with indirect cove lighting.

The walls are acoustically treated and there is an oak wainscot and black base. The ventilation is washed air entering the room at the ceiling through the light coves, taken off at the floor through vents of the mushroom type.

The stage is equipped with full remote control switchboard, scenery loft with grid and a complete complement of scenery, velours curtain and asbestos drop. The orchestra pit will accommodate sixty. This is ac-



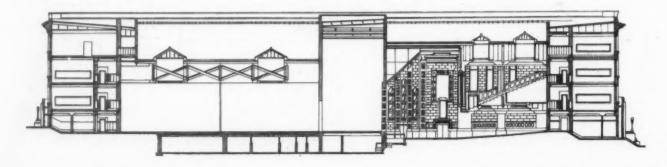
All stairs and corridor floors are of terrazzo. Below, section of building.

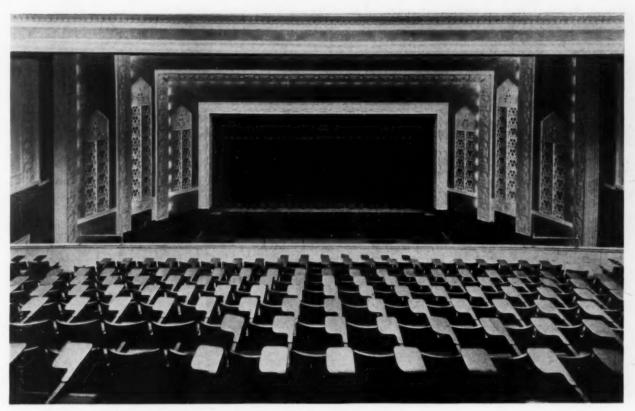
cessible from the property and dressing room level below the stage. Organ chambers with grilles are located at the proscenium.

The ornamental plaster in the auditorium is interesting and modern as the motifs are taken from Swedish chip carving and when decorated will give the effect of large cut jewels.

A practical feature of the plan is the placement of the gymnasium, which opens off the stage at the rear and is on the level of the stage. For large entertainments, both the auditorium proper and the gymnasium can be used for seating purposes, accommodating 6,000. This gymnasium may be closed off from the auditorium by sliding folding doors at the rear of the stage.

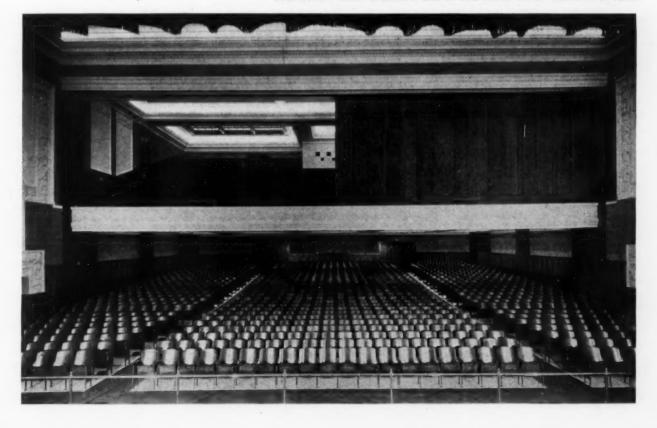
The same type of folding doors

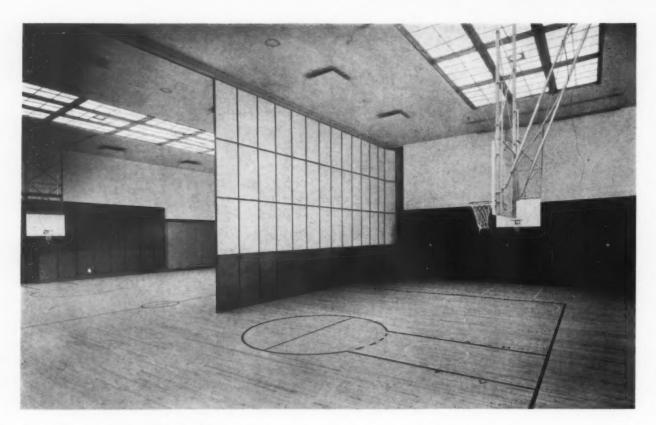




The auditorium, which seats 1,800 pupils, may also be used as a study hall for 700, the lower floor chairs having tablet arms.

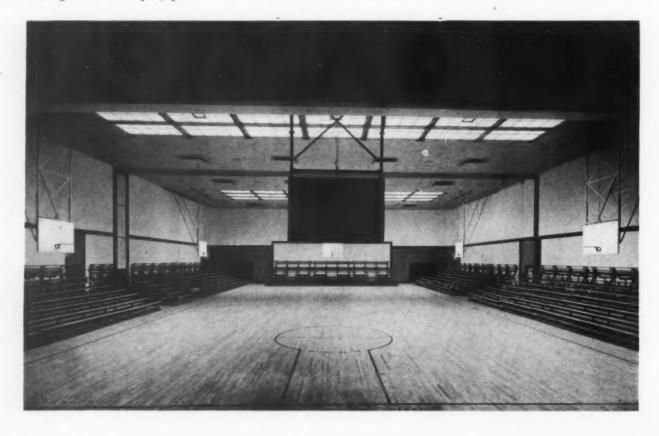
Electrically operated doors shut off the balcony portion of the auditorium when exclusive use of the lower floor seems desirable.





that separate the gymnasium from the stage also divides the gymnasium itself into two gymnasiums of equal size, for boys and girls, each accessible to its shower and locker room space on the floor below. When these folding doors are open, port-

Folding doors permit both a boys' and a girls' gymnasium of equal size, each accessible to shower and locker space. Other folding doors separate gymnasium from auditorium stage. When these open together seating space for 6,000 is provided or bleacher seats for an audience of 2,200 at exhibition games and matches.



able bleachers on the stage and the folding bleachers of the gymnasium will accommodate 2,200 people for exhibition games. Three sets of bank boards of the hoist-away type along the walls of the gymnasium make possible the play in two transverse courts or on one longitudinal court as desired.

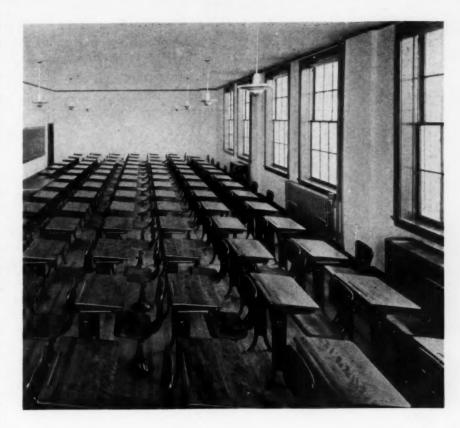
The basket system is used in the locker rooms. The wainscoted walls with terrazzo floor and base make these rooms and the adjacent showers light and sanitary in appearance.

The lockers throughout the building are of the recessed type with built-in construction, having lock and master key for inspection.

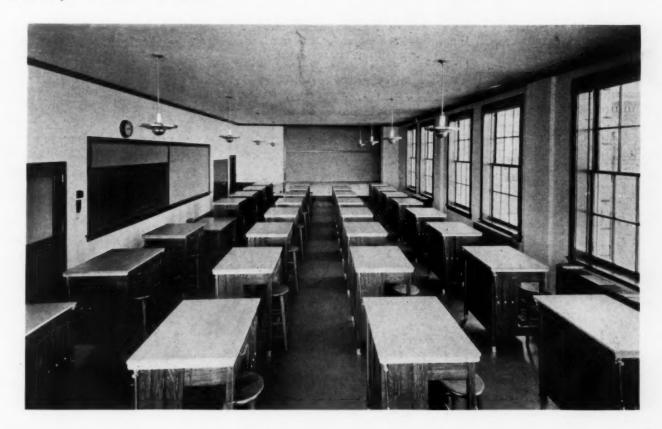
The band room on the third floor of the building is another interesting feature as it is soundproofed with double walls and floors and acoustically treated.

Drafting rooms, laboratories and book storage rooms are all provided with built-in equipment of special design.

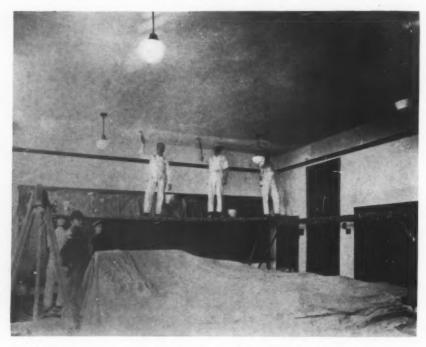
This new million-dollar high school, was completed just as W. I. Early, long its principal, was named superintendent of the Sioux Falls public schools by the board of education.



Classrooms are well lighted, and the various drafting rooms, laboratories and book storage rooms are all provided with built-in equipment of special design. The interior wood trim is of oak and the first floor corridors have booked marble wainscot and border.



Better Plant Practices · · ·



Clean light colored paint adds light to classrooms; soiled or dark paints absorb the light.

Reflection Value of Paint Colors

Repainting and redecorating of school walls and ceilings used to be done largely for appearances but the modern school superintendent and custodian are learning how much clean and light colored surfaces, particularly of ceilings and upper walls, are a part of the lighting system. They are important reflectors of daylight and artificial light.

The following table shows the comparative reflection values of paint colors:

Color P	er Cent	Color	Per Cent
White	89		63
Ivory	82		green59
Canary ye	llow.77		pink55
Cream	77		sage52
Caen stone	76		gray 46
Orchid	67		tan43
Cream gray	766		green22
Ivory tan.	66	Cocon	ut brown.16
Sky blue	65	Black	2

Washable Wall Paper Lives Up to Its Name

If the home economics rooms, the library, offices or teachers' lounges happen to be decorated with the new washable wall papers, do not hesitate when it comes cleaning time. They may be depended upon to live up to their name. These papers react to water and other cleansing agents much as does cloth. They will darken as the water soaks in but will dry out unharmed.

Much depends, as in fabrics, on the type of stain to be removed. There is one general rule to observe, however: do not use hot water. One recommended procedure is to start with a commercial wall paper cleanser, then to wash any spots that remain with cold water and mild soap on a soft sponge. This should then be rinsed thoroughly with clean water.

Grease spots that have penetrated the paper can be treated successfully with a paste made of Fuller's earth and any good dry cleansing fluid. When completely dry, remove the Fuller's earth with a little of the cleansing fluid on a soft cloth. Should a ring remain, apply a mixture of Fuller's earth and water.

To remove fresh paint apply paint solvent. Some marks, too, can be removed with an ordinary pencil eraser. Fruit or food stains present the greatest problem and, of course, the older the stain is the more difficult it is to remove. Try washing the spot first with soap and water on a rubber sponge, then with

alcohol. If, after it has dried, the spot remains, try ordinary household hydrogen peroxide. This entails considerable care lest it change the color in the paper.

Ink eradicator used sparingly will remove ink spots. Again extreme care must be exercised lest it change the colors in the paper. It is better to try small spots first and always wash afterward with water on a rubber sponge.

Finally it is well to remember that protonged soaking, particularly with soapy water, tends to soften the colors and reduce the amount of rubbing the paper will stand. Consequently any rubbing should be done immediately after the paper is wet.

Cleaning Staff Schedule

How one school district handles its general school cleaning is told in School Business Affairs. The routine is as follows:

As many men as are necessary to care for the heating and ventilating of the building, the swimming pool locker rooms and similar duties are on duty from 7 a.m. to 3 p.m. At 1 o'clock this crew is augmented by other men who clean entrances, wash windows, distribute paper towels, make minor repairs and other such work as can be done before the close of the school day.

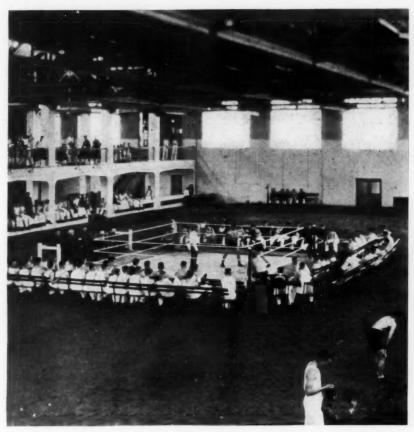
At 4 o'clock the women janitors come on, and they clean and dust the class-rooms until 5:30 p.m. From 6 to 9 p.m. the men clean the corridors, lavatories, dispose of paper and other such tasks. Then they go off duty.

The night watchmen come on at 9 p.m., and certain tasks may be assigned to them in addition to their regular rounds.

AN INVITATION

Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.

Wanted—"Play" Programs



"Show me a boy who has completed a course in educational play and I will show you one who can coordinate body and mind."

THE modern school plant does not provide adequate facilities for health and recreation programs. In many schools of 1,200 capacity, and ofttimes greater, there is only one gymnasium, and a great percentage of schools have only a small, poorly kept yard for a play field.

It is unfortunate that almost all people, both the educated and the uneducated, give the same dogmatic definition to play that they give to recreation. That is due to the fact that for many generations mankind has thought of nothing but the physical development brought about by play and has failed to recognize the other great elements covered by this term.

A good example of this wrong conception of the term "play" is the German Turnverein where physical ac-

tion is the sole objective. It is not within the province of this article to consider the value of a recreation program to care for the ever-increasing leisure time demands. That is an important adult problem. But schoolmen must take into consideration more than the body of the child; the mind and spirit of this young human being must be developed as carefully and conscientiously as the body. Therefore, it is necessary to separate the words recreation and play in our thinking and to make the term "play" mean that it is a program of development of body, soul and mind. Until this is recognized by educators, play to the child will never be anything more than recreation or physical exercise, and therefore it will be impossible to establish a play program with sufficient facilities.

By D. C. TODD, M.D.

Consider for a moment just what a vehicle it could become for producing a well-balanced human product. In the first place play is the natural instinctive urge of childhood. Therefore, if it has value, the programs need not be forced programs.

Organized educational play in our school system can be made the greatest and most productive department in our whole educational establishment. What study in any field can teach self-control as well as organized play? Where can you find any activity in which quick, logical decisions must be made in the time of emergency? How can you show anywhere a program in which social relations can better be developed than through the field of contest? How is it possible to conceive of anything that affords a greater opportunity for cooperation with others-in other words, teamwork? How anywhere can you as well develop courage and determination? Is it possible elsewhere as thoroughly to develop the spirit of true charity toward the unfortunate or the defeated, and how can a child better learn to accept defeat with fortitude and with a smile? The word "play" might be enlarged upon indefinitely, because every element required in human activity and relationship can be included in this defi-

Nowhere away from the mother's knee can a child as thoroughly learn obedience to law. For if our course is properly organized he must obey the rules or the laws governing the game; therefore, a properly established program means the development of the quick, keen mind, a law abiding citizen, a cooperative individual and one who is taught to coordinate mind, body and spirit in his every action.

If these fundamental principles are included in the definition of play, schools unquestionably have insufficient facilities to meet the needs. Unfortunately the old-time definition stands. Almost every time the subject comes up prominent educators are heard to say, "Yes, I believe in playground and play education, because every child must have exercise." With the proper understanding of this term, the physical development or exercise is reduced in importance almost to that of a necessary by-product. Until our educational

group recognizes that during the school age, play is a much bigger and broader thing, our play programs will not be properly developed. As soon as our leaders of thought appreciate the importance of educational play, greater facilities will naturally follow.

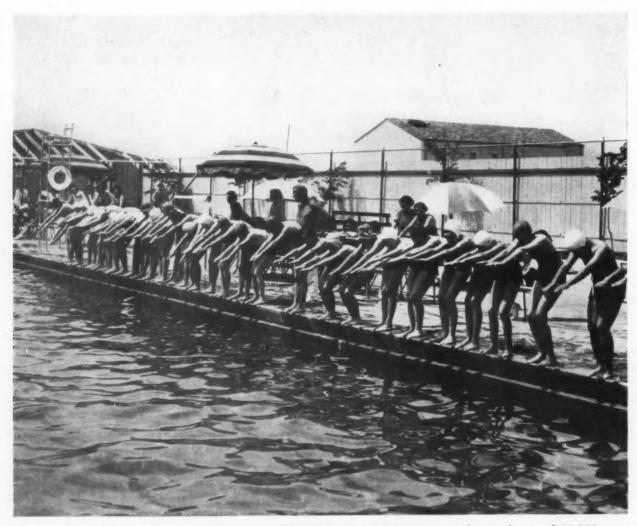
The department of physical education in our public schools is antiquated in many of its divisions, because the problem has not been discussed and considered as have other departments in education. It is essential that we have a year round program. In our closely populated cities the natural outlet of this youthful urge is not given proper opportunity. Our school districts have failed to recognize that, because of the density of the population, the child is so limited that he is constantly confronted with physical and moral hazards.

In establishing a year round pro-

gram it must be remembered that many states, by law, make it impossible to have summer playgrounds because they define the word "play" as physical recreation and do not recognize the educational features. Therefore, it behooves some organization, such as the National Advisory Council on School Building Problems, to pioneer in developing the proper conception in this field of action.

Not only must school heads endeavor to build a proper program, but the populace at large must be taught what educational play means so that it will pass laws to make the play program a part of the educational set-up.

The public school systems of the United States do not provide half enough facilities for health and play programs, either in fixed equipment or in properly trained leaders.



The swimming pool of this California consolidated high school has an annual attendance of 58,000.



An open air gymnasium provides for all kinds of sport—basketball, tennis, handball and roller skating.

Planned for Play

By WESLEY SHERWOOD BESSELL

HEN a school, through its performance in the educational field, develops progressively in size and attendance as has Mount Vernon Seminary, Washington, D. C., for more than fifty years, then the wisdom of careful planning for the future is essential, in order that growth in the coming years may be made easily and without disrupting an established organization.

To this end Mount Vernon Seminary has diligently looked forward. As a result, when the new main building was finished in 1917, a definite idea was founded with this unit as the basis of its relation to all future growth. Since the completion of the first building several other necessary buildings have been added from time to time, such as a residence for the headmistress, a memorial chapel and the two units to be described—an open air gymnasium and a field house.

Both of these buildings are located far enough away from the main houses to permit the students to "let off steam," that is, to sing, dance and Here is one school's answer to Doctor Todd, author of the preceding article. This private school has built an open air gymnasium which permits no interruption of outdoor sports during bad weather. When games are over, pupils adjourn to the field house for relaxation. be merry, throwing off the burden of study and giving way to a natural letdown.

These two units are adjacent and are used during the entire school year, the gymnasium for all kinds of sport, such as roller skating, basketball, tennis and handball. The gymnasium building is planned to provide a full regulation basketball court, or when not so used, the area may be divided into two shorter courts for practice work. The same applies to the tennis court.

The span across the building is 90 feet, and both sides of the building are open, except for the masonry piers supporting the roof trusses. The trusses are of the laminated or built-up type, and were reasonable in price. They were shipped knocked down and were built up on the operation. They are light in weight.

The openings are 12 feet wide and 15 feet high, and are covered with heavy wire guards. They are also provided with stout canvas duck rolling curtains which may be let down during inclement weather. If the cost had not been a factor, the use of steel rolling shutters in the large openings would be a more permanent solution than the canvas curtains, as the latter require replacing.

The two end walls of the building are of wood the full height. The roof has two skylights, each 17 by 60 feet, built into the slope with corrugated wire glass and metal. This corrugated glass answers two purposes. It deflects the direct rays of the sun and prevents the casting of light into the players' eyes. It also diffuses the heat of the sun, which is always intensified when coming through ordinary glass. The interior of the gymnasium has ample light for all purposes, and electric fixtures under wire guards are provided for night use.

Benches with hinged seats are arranged along the two long sides of the building. Under these seats there is space to keep many articles used in gymnasium work, such as dumbbells, basketballs, hockey sticks and similar equipment. Ceiling and trusses are painted a light color so that they reflect light on all the games.

Floor beams are covered with a double floor; maple is used for the finished flooring, assuring the players of a hard firm surface free from splinters. The entire underframing is left exposed, as the floor level is set 3 feet above grade. In this way no dry rot can develop.

Such a building has two advantages. It brings the pupils out into the open air for play and sports, while still sheltering them, and it further permits of use during bad

Relaxation after exercise is provided for by means of the field house with its great central hall opening clear to the rafters and a large fireplace alcove with benches and seats on either side.



weather. A heating system is not required and building upkeep is negligible. The plan is arranged to permit the addition of a locker house with showers directly connected with the gymnasium.

After indulging in exercise or play in the gymnasium, a pupil or group of pupils may then adjourn for relaxation to the large room of the field house. This building has a large central hall open to the rafter tops. The ceiling soffit is painted a very light red while the beams are finished with a brown stain. There is a large fireplace alcove with benches and seats in it, and a bluestone floor. On either side of the fireplace are brick openings where sufficient wood is stacked for use in the fireplace. Here the pupils may gather and chat, play games or divert themselves in any way they desire.

At one end of the large room is a service counter running across the entire room. It is connected with a kitchen where food is prepared and serviced over the counter or delivered on a colorful vendor's cart directly to the tables set in the hall.

At the end opposite the counter is a novelty and supply shop, set within a smaller wing and shut off from the large hall by glass doors. In this shop counters and shelves against a pine board wall are filled with all sorts of interesting things—needlework, copper and brass ware and paintings. Many of the articles are made by the pupils, others are donated. To one side a small built-in cashier's desk is provided. The receipts from the sale of articles go to some charity.

A pine paneled lobby, coat room and washrooms, and a small office complete the field house plan. Outside a terrace of generous width permits the pupil to lounge or enjoy tea during warm and sunny weather.

This field house is built of brick with a slate roof. It has no cellar and the floor is laid in mastic cement on a waterproofed concrete base. Around the entire outer wall a trench was formed to take care of the heating and plumbing lines. Heat is sup-

plied from the central heating plant, and run through a main with underground returns. All the pipes are within tile conduits.

In this building are all the elements conducive to freedom of action and relaxation. Card parties are held here, also games and dancing. Small entertainments are put on by the pupils—picnic parties, as well as more formal luncheons. The whole at-

mosphere is that of disassociation from school life.

The pupil's approach to the more serious problems of school work is made keener by the simple methods of this contrast. In its farsighted policy Mount Vernon Seminary has endeavored to anticipate all future growth, and therefore these units have been planned of a size ample to accommodate possible expansion.

Washing the Dishes

A CAMPAIGN to reduce dish breakage in the school cafeteria and kitchens can sometimes effect substantial savings. In a recent study made of dish breakage in commercial restaurants, it was found that 35 per cent of the dish breakage came in sorting and stacking dishes. An improved layout in the kitchen helps to reduce breakage occurring from this source.

Obviously it must be possible for those who bring dishes into the dishwashing department to deposit them quickly and with the least amount of breakage. This is impossible if the quarters are cramped. There should be room so that trays do not need to be rested on ledges or piled on top of one another.

One commercial lunchroom has solved the problem of quick dish deposit by building a series of shelves 12 inches apart on top of the sorting table. Trays of soiled dishes are placed on these shelves and dishes are removed to the sorting table by the dishwasher.

The dishwasher sorts china, glass and silver — teaspoons into one bin, tablespoons into another. Glasses go into a special dish rack and china into other racks. Sorting the silver before it goes into the dishwashing machine speeds up the sorting later.

In some lunchrooms the sorting table is equipped with a rubber mat or linoleum cover, so that the dishes never come into contact with hard metal surfaces. In most well run kitchens all dishes are scraped by hand with a rubber scraper, and dishes with grease on them are moistened in a pan of hot water before being placed in the rack for washing.

Often the clean dish end of the machine gets overcrowded with clean dishes, slowing up the work and increasing the tendency toward breakage. A few minutes to drain is an advantage but frequently the clean dish table is used as a storage base, and this reduces the efficiency of machine and personnel.

Glassware and silverware usually have to be dried with towels, in order to give them a polish. The glassware is frequently washed first while the water is entirely free from grease and food particles. In some installations, the dishes are washed first and after they have been cleared away, the machine is drained out and filled with fresh clean water for the glasses.

Extremely thick glasses may, in rare instances, crack from exceedingly hot water. Ordinary glassware and the finer grades of thin glassware will not be affected by the water, no matter how hot. This is because of the fact that the water reaches the inside and outside surfaces of the glass at the same time resulting in even expansion.

The dishwashing machine should be cleaned daily. The exterior should be kept as clean as the inside in order to encourage the same standards of sanitation throughout the kitchen.

Facts on Fuel Costs

By A. M. McCULLOUGH

HE annual purchase of fuel entails the largest expenditure for a single supply made by the school systems of the nation. That this purchase is made in the most economical way is of great importance to school administration. It must be borne in mind that the complete management of any supply does not end with its purchase. The proper conversion of the article into usable educational services, and the consumption of such services in an economical manner constitute the cycle of business management for each article.

When an analytical study is made of the heating of schools, we find there are three elements involved: the purchase of fuel, the economical conversion of the fuel into heat, and the proper distribution of heat throughout the building.¹

Effecting Economies

School administrators generally recognize that there should be a proper method of purchasing fuel and that different types of furnaces require different types of fuel. They know that the furnace and heating plants may be constructed to fit varying conditions and that various methods of firing produce different results. They also know that different persons in charge of the same building are likely to use varying amounts of heat.

An investigation of the literature in both the fields of engineering and school administration fails to reveal any scientific research on fuel management of schools. Within the past year a critical analysis of the fuel management programs of certain cities has been made.² From the findings of this study the following twenty-six practical suggestions are offered as a means of effecting economies in the field of fuel management.

- Ascertain the fuel best adapted to the various furnaces in the school system.
 - 2. Set up adequate specifications.
- 3. Provide for penalties for failure to meet these specifications.
- 4. Purchase the fuel in such a manner that the most heat is obtained for the least money.
 - 5. Provide for competitive bidding.
- 6. Purchase on the large quantity
- Purchase in the low price season.
- 8. Set up means for carefully checking both the quality and quantity of fuel delivered.
- 9. Provide for the proper storage of the fuel.
- 10. Set up an adequate accounting system.
- 11. Provide forms and record daily the amount of fuel consumed.
- 12. Record outside temperature (morning, noon, closing time) and inside temperature (warmest and coldest rooms).
- 13. Set up standards of fuel consumption on the basis of unit quantities per degree-day.
- 14. Plot the fuel consumed per degree-day on a weekly or monthly basis.
- 15. Provide a boiler-operation schedule based on outside temperature for the following: (a) boiler operation procedure, (b) starting time, (c) banking time and (d) shutting-off time.
- 16. Provide a schedule for firing

based on the outside temperature as follows: (a) on holidays, (b) during vacations, (c) Saturdays and Sundays, (d) fall and spring months and (e) on the use of the building.

- 17. Provide a schedule for cleaning the boiler: (a) flue, (b) ash pit and (c) draining.
- 18. Provide for a survey of the heat controls: (a) for the boiler and furnace, (b) for the heating plant and (c) for the building.
- 19. Provide for a study of the most economical fuel.
- 20. Survey the whole heating plant and building to discover and remedy all losses of fuel and heat.
- 21. Measure and record the amount of heat consumed per degreeday.
- 22. Set up a standard of heat consumed on the basis of unit quantities per degree-day.
- 23. Plot the amount of heat consumed per degree-day on a weekly or monthly basis.
- 24. Provide a schedule for heating the building based on the outside temperature as follows: (a) turning on the heat, (b) shutting off the heat, (c) vacations, (d) on holidays and week ends, (e) fall and spring months and (f) use of the building.
- 25. Provide a schedule for heating the building based on its use at varying outside temperatures: (a) total building, (b) auditorium, (c) cafeteria, (d) gymnasium and (e) any other section or unit of the school building.
- 26. Provide a maintenance program that will ensure the correction of heat and fuel losses whenever the loss justifies such repairs.

These twenty-six items are practical in effecting fuel management and, if properly and fully carried out, will give a fuel-management program that can operate at an economical level.

¹ McCullough, A. M.: A Critical Analysis of the Fuel Management Program for Schools, Bureau of Publications, Teachers College, Columbia University, 1936.



Pupils prepare the food and operate this cafeteria which serves 150 guests in half an hour.

Lessons From Food Service

By MARGARET KENNEDY

N NOVEMBER, 1934, a new course in institutional management was offered to the pupils of Nutley High School, Nutley, N. J. It was designed to give girls vocational training in the preparation and serving of food and in the operation and management of a cafeteria and tearoom, and at the same time to provide nourishing and low priced lunches for pupils and faculty.

Previous to this time the cafeteria had been operated on a commercial basis by trained operators. The course in institutional management makes the service in the cafeteria and faculty tearoom an educational project. The course is open as an elective to any girls who are interested in becoming dietitians, waitresses, counter girls, tearoom operators, nurses, cashiers or in any other phase of institutional work in dietetics.

The rooms in which this work is conducted are located in the basement and consist of kitchen, dining rooms, tearoom, storage rooms, office and locker rooms. The kitchen is that of a usual large quantity cookery unit and comprises the following equipment: two sections of hotel range, one baker's oven, one electric mixing machine, one electric potato peeler, one ice box, one dishwashing machine, two cook's tables, two work tables and three sinks. The cafeteria dining room is a large rectangular

room seating approximately 300, and contains the serving counter, dining tables and chairs, cash registers, water cooler and ice cream cabinet. The ice cream cabinet and candy display counter are placed along the wall in the center. This location enables purchases of these articles to be made with greater facility.

The tearoom is a small rectangular room containing eight tables, each seating four guests. The color scheme is rust and blue. The tables and chairs are painted rust and blue table runners and doilies are used as well as blue chair-back covers. The art department is responsible for attractive murals, depicting scenes from

Nutley, which decorate the walls, also for two wall hangings and attractive menu holders. The clothing department made the chair-back covers and the manual training department did the necessary painting, and made a coat and hat rack, where guests may check their coats before entering the tearoom. Blue glass vases and candlesticks are used to decorate the tables.

Two storage rooms, one for vegetables and the other for canned goods, are convenient to the kitchen and service entrance. A small room adjacent to the kitchen serves as an office, and contains a desk, filing cabinet, telephone and typewriter. All records and recipes are filed by the pupils, for their own later use.

Pupils in the accounting department are responsible for the book-keeping and records. They receive the daily bills and keep all the records. The bills are paid at the end of every twenty-one days and a profit and loss statement is prepared. The aim of the cafeteria director and school administration has been to work out an educational project, not to make money, yet the project has managed to show a profit.

Every pupil in the institutional management class has one hour of classroom work each day; one fortyminute serving period each day; one hour conference period each week, and field trips whenever possible. Pupils may elect the course for one semester, but one year is suggested for those who wish to be recommended for positions.

The work of the classroom period is divided into units. When a girl has completed a unit of work to the satisfaction of the instructor she is given another. In the "hot unit," for example, she learns how to prepare soups; the principles of meat cookery and carving, including the operation of the meat slicer and use of the ranges; methods of preparing fish and sea food, meat substitutes and creamed dishes, dried and canned vegetables (including use of the potato peeler), and finally deep fat frying.

In the pastry and dessert unit she is taught the preparation of cakes, one and two crust pies, bread and cereal puddings, quick breads and muffins, and such desserts as custards, baked apples, tapioca, fruit whips, jellied desserts and shortcakes. In the preparation of such dishes, she is made familiar with the operation of the electric mixing machine and the use of large equipment. Sandwiches are also included in this unit — their preparation, the

materials used, the kind of bread, preparation of the butter and their wrapping.

Finally there is the salad unit. This covers the care and preparation of materials — salad greens and salad dressings—as well as the preparation of vegetable, fruit, fish, meat and cheese salads. Cold plate combinations, picnic lunches and cold school lunches are also included.

The work at the noon serving period is divided as follows: three sandwich girls; three girls to serve the hot dishes at the steam table; one serving girl for salads; one serving girl for desserts; one runner to keep the stations supplied with food; one girl for ice cream and candy; two cashiers, and one girl for emergency preparation in the kitchen. The cashiers set up the cash register, ring up each purchase and at the close of the period prove the cash.

A popular everyday feature is the made-to-order sandwich. One whole counter is set aside and three girls are kept busy making up each sandwich to order. Customers may have them on white, rye, or whole wheat bread, and have a choice of eight different sandwich fillings. The bread is buttered before the serving period begins.

Other articles served every day are rolls, muffins, chocolate and plain milk and four flavors of ice cream. The only resale foods purchased from commercial firms are the candy, ice cream and the milk. All other articles are made by the girls.

The girls, in fact, do all the work in connection with the food preparation and the operation of the cafeteria. Approximately 150 guests are served every day in a half hour. Prices are kept low, the average dish costing 5 cents.

The hostess in the tearoom assumes her duties after having satisfactorily completed the work of waitress. She types the menus, is responsible for the work of the waitresses and instructs them in their duties. She assigns them to their tables and supervises the dining room, greeting the guests upon their arrival



The faculty tearoom decorated by the art department is in rust and blue. Tables and chairs are painted rust. Table runners, doilies and chair covers are blue. Eight tables seat four each.

Let's give FINNELL

Speedl... Powerl... Mobilityl... Capacityl... These are outstanding features of the new 100 Series Finnell. Its efficiency has won the praise of all who operate it—its beauty is admired—its economy appreciated. Four sizes—11, 13, 15 and 18 inch brush rings. Large models may be fitted with interchangeable brush rings—to fit small as well as large areas.

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That's all we ask—a chance to show you ... to show you how to treat the type of floor in your building ... to show you whether you should use wax or soap and water, and how often and with what methods ... to show you how to get results without using costly cleaners, abrasives or any other "easy way" of floor maintenance that will ruin your floors in a short time ... to

show you how to choose exactly the right machine to maintain your floors in perfect condition . . . in a word, to show you how you can actually get clean floors without cost.

In giving us this opportunity, you do not commit yourself in advance to any expenditure of money. It is simply a challenge to us to prove our statements—a challenge which we gladly accept. We would not dare to do so were it not for (1) our complete line of floor machines, including sizes both large and small and models of various types, (2) our full line of floor treatments, including waxes, soaps, soap powders and cleaners, and, (3) above all, our third of a century of specialized experience in helping institutions of all kinds to keep their floors clean and beautiful at a saving.

Floor Survey Free. Upon request from you by letter or by wire, a trained Finnell representative will call on you, make a scientific study of your floor conditions and floor requirements and give you a report showing the method best suited to maintain your floors and the probable results. Address: FINNELL SYSTEM, INC., 211 East Street, Elkhart, Indiana.

FINNELL SYSTEM

and seating them. At the close of luncheon she receives the money and records it.

Four waitresses are on duty at one time. They care for the dining room, dust, set the tables, arrange the decorations and set up the service table. They receive the written orders of the guests, have them filled from the cafeteria steam table and serve them. They remove soiled dishes and reset the tables. These girls are required to know the types of table service used in home and restaurant.

Menu planning and dietetics are studied in class, particular attention being given to the necessity for wellcooked, nourishing meals for the school child; balanced meals for the child and adult; the importance of school lunch from the standpoint of health, economy and time; classification of foods into fats, carbohydrates, proteins, minerals and vitamins, and the planning of menus.

Much of the ordering is, of necessity, done by telephone. Each pupil has an opportunity to make out the market order for the next day and to telephone in the order. Whenever possible, girls are sent on marketing errands. Salesmen from the wholesale houses make calls and it is planned so that a pupil is present during these interviews. The groceries and vegetables are kept in store rooms and a pupil checks in the articles as they arrive and reports damaged or missing goods. Laundry is also checked in the same manner.

A study is made of the types of equipment required for the operation of a large quantity food establishment. Catalogues of dealers are studied and a visit is made to the Hotel Exposition for further study of equipment and its operation. In addition field trips are arranged, one each month, and discussions held before and after each trip.

Each year two to three special dinners are served, and tea is arranged for some group at least once a week. The girls take turns serving at these functions, which gives them additional experience.

Each week a one-hour conference

period is held after school for the purpose of bringing together all the girls of the various classes for the discussion of classroom problems, field trips and any other issues that may arise. Assignments are made during this period.

Many of the pupils have secured employment as a result of their training in institutional management. It is planned to secure the cooperation of various food establishments in the placing of capable girls upon the completion of the course.

The course is not only of value to those who are interested in home economics but is a personality builder. The girls become proficient in salesmanship and develop an ability to get along with others. They acquire poise, an ease in meeting the public and gain in creative and artistic ability. It is a step forward in progressive education.

The two menus, which follow, are popular in the Nutley High School:

Chicken soup with rice 5c Virginia baked ham 10c Candied sweet potatoes 5c Fresh buttered spinach 5c Peas and carrots 5c Beef stew with vegetables 5c Pear and cream cheese salad 10c Gingerbread with whipped cream 5c Fresh fruit cup 5c Baked cup custard 5c

Cream of asparagus soup 5c Roast beef with gravy 10c Mashed potatoes 5c String beans 5c Harvard beets 5c Chilli con carne 5c or 10c Banana peanut butter salad 10c Chocolate cake with chocolate frosting 5c Pineapple pudding with whipped cream 5c Baked rice pudding with raisins 5c

"The School Cafeteria"

Reviewed by CONSTANCE HART

For many years there has been a need for an authentic book to deal with the countrywide problem of weigh all these viewpoints scientififield that is pertinent to school lunch-

The book emphasizes the funda-

school lunchrooms. Many articles have been written in periodicals both technical and otherwise on various phases of school cafeterias. Some have emphasized one point and some another, but it has taken Dr. Mary deGarmo Bryan, head of the department of institutional management, Teachers College, Columbia University and editor, school feeding section, The NATION'S SCHOOLS, in her book "The School Cafeteria"* to cally and to set forth the broad educational and social aspect of the school lunchroom. She has made exhaustive studies on practically every

*Bryan, Mary deGarmo: The School Cafe-teria. New York City: F. S. Crofts and Co., 1936. Pp. xvi+726. \$3.50.

mentals in operating a school lunchroom — the type of school management; establishment of personnel policies; organization and management; the staff policies of financial management; records for control; menus; beauty and utility in furnishings and equipment; hot lunches in the rural schools; legislation relating to school lunchrooms, and the purchasing of foods, with an appendix and tables for food specifications and references.

A list of forms for various lunchroom operations is given. There are detailed studies of job analysis sheets, various record forms for keeping school accounts with the forms set up. Many suggestions are given on lunches for children, building the menus around milk as a beverage and in the form of dessert or soup. One is impressed throughout the whole book by Doctor Bryan's emphasis on the fact that the school lunchroom

DESKOR CHAIRS SAVE 331/3% OF BUILDING COSTS!

UNION SCHOOL DISTRICT CONCORD, N. H.

CHESTER A. HOGOY, SUPERINTENDENT

October 6, 1936

Mr. Willis D. Rich, President Deskor Chair Corporation Park Square Building Boston, Massachusetts

My dear Mr. Rich:

Your Deskor Chair convertible equipment in combination with the recent Fairhurst invention of a moving wall has made possible a very unusual school house design and construction for our new Elementary School building in East Concord. For an expenditure of only \$80,000 this building will accommodate as many pupils with the same school program as could be housed in the building as originally planned which would have cost \$120,000.

The original plan called for seven class rooms, an auditorium, a stage, two dressing rooms, two offices and the other necessary appointments. The \$40,000 saving came from the elimination of 3 class rooms and two offices by arranging for combination use of all auditorium space including stage and dressing rooms.

The stage of the auditorium is a regular class room, the girls' and boys' dressing rooms are principal's office and teachers' room respectively, the auditorium proper is divided into two class rooms and even the main corridor connecting the wings of the building is the foreground of the auditorium.

The success of this combination planning would have been impossible without the 100% cooperation of the architect, Harold Holmes Owen, of Concord, New Hampshire.

Of course it will be realized by anyone connected with schoolhouse construction that the elimination of five rooms means less excavation, foundation, basement space, roof space, corridor space and less cubage generally as well as fewer fixtures of many kinds, but it may not be realized that a constant saving in maintenance throughout the lifetime of the building will be effected in heating, lighting, repairs and janitor service of a smaller building with exactly the same facilities as the larger one.

It is my belief that the combination design is applicable to large buildings as well as small ones and that your ingenious Deskor Chair together with the moving wall should revolutionize school planning of the future.

Yours sincerely, Chester L. Moody

Chester A. Moody Superintendent of Schools

CAM:ap

The Deskor Chairs on the stage can be instantly removed and placed on the main floor to supplement the Deskor Chairs already there. All of the desks can be instantly converted into extra chairs thus providing auditorium seats for the entire school.

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centers around the health and education of the child.

One of the most interesting chapters in the book is on record and controls. To quote: "Cafeteria records deal with three major aspects of food cost control, namely, the control of personnel, the control of food and the control of money. They include personnel records such as employees' record cards, the time book and payroll; the purchasing and storeroom records such as orders, and inventories; and kitchen and service records such as recipes, and menus; and the counter records, accounting and financial and food control reports made daily, the monthly statement of income and expense, and the annual

balance sheet. Each group of records is essential to the management of the whole together with establishing the mechanism for food cost control." Each of these points is elaborated upon and a discussion is given on records for the small cafeteria as well as the large centrally managed system, giving lists and forms that are necessary for each.

There is a splendid list of suggestions for menus that includes suggestions for soups, main dishes, salads, sandwiches, beverages, hot breads and desserts.

A complete description is given in the selection, location, layout and care of both small and large equipment for various sized lunchrooms.

Scientific Feeding Is Conference Topic

Current cafeteria techniques in relation to the welfare of the school child occupied the attention of more than 200 school cafeteria managers and food experts at the second annual Food Service Directors' Conference held in New York City, October 2 and 3.

Dr. Walter P. Eddy, director of the Good Housekeeping Bureau, speaking on "Ice Cream and the School Lunchroom," minimized the belief that commercial ice cream is highly adulterated, and stated that on the contrary it compares favorably with milk in nutritive value.

D. G. Cummins from the federal Department of Markets gave some criteria for the purchasing of meats, and W. C. Huckleman from the same department talked on the "Purchasing of Canned Fruits and Vegetables." Constance Hart, director of school cafeterias in Rochester, N. Y., in a paper on "Merchandise Standards," pointed out that canned foods contain the same necessary vitamins as fresh, and have the advantage of imperishability. Frosted foods, while more perishable, once opened, have a uniformity of quality and price throughout the year that fresh foods lack, she said.

Equipment was the subject of a discussion by Emma F. Holloway of Pratt Institute, Brooklyn, in which she emphasized the importance of records for service costs.

The English school child's diet of a decade ago, and its deficiencies in calcium and proteins, was compared by Dr. Mary Swartz Rose of Columbia University to the present day diet, in which the English school child receives in one day's lunch as much nutritive value as he formerly did in a week's lunches.

What schools are doing in their cafeterias to train young people for jobs was told by Mrs. Margaret Furney of Brooklyn Industrial High School for Girls. Mary Hemmersbaugh, supervisor of school lunches in Cleveland, gave an interesting analysis of the lunchroom as an essential school activity.

Teaching the school child "respect for food" was urged upon the delegates by Dr. John S. Roberts, associate superintendent in charge of high schools, New York City. Albert E. Idell, supervisor, board of education, Philadelphia, laid stress on the importance of keeping simple records and changing the accounting system as infrequently as possible.

FOOD FOR THOUGHT

- Color applied to the cafeteria gives new zest to appetite and promotes social objectives. Miss Grace Moffett of San Antonio, Texas, in laying out the school cafeteria in the new junior high school has introduced red striping around the deep cream walls. Her table tops, too, have a red border, varnished, and the chairs are similarly decorated. Then as a finishing touch she dresses her employees in white uniforms with red collars and cuffs, red buttons and a red handkerchief sticking from the pocket. The whole effect is colorful and pleasing.
- Samuel Pfeiffer, supervisor of school lunchrooms, Buffalo, N. Y., apportions his budget as follows:

Food	 				. 60	per	cent
Payroll							
Supervision	 			 o	. 3	per	cent
Replacements	 0 0	. 0	0	 0	. 2	per	cent
Repairs	 		0		. 2	per	cent
Paper goods, etc					. 1	per	cent
Profit	 		0		. 2	per	cent

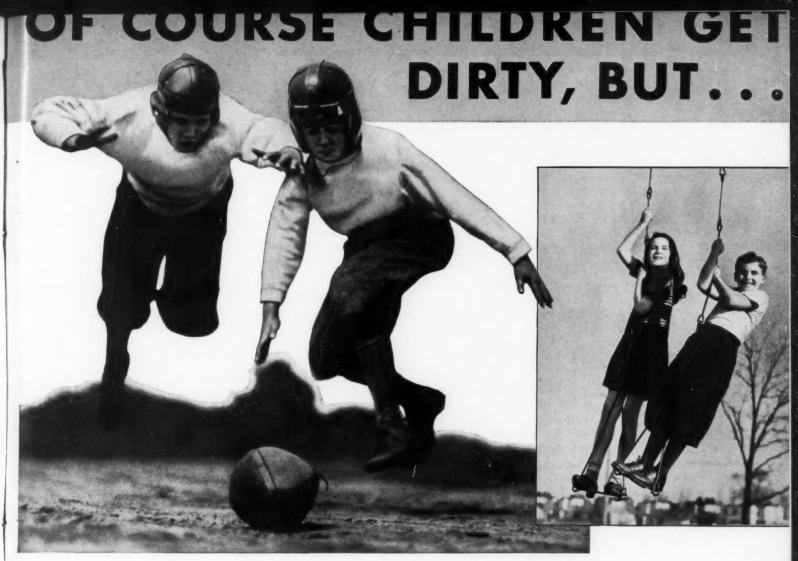
A training course of twenty lessons is given to managers of the individual cafeterias, dealing with cost accounting, quantity recipes and various angles of lunchroom management.

• School lunchroom managers, chiefly from the Middle West and Southwest, meeting in conjunction with the National Restaurant Association in Chicago, October 5-9, considered the possibility of organizing a national association.

Grace Helene Miller of the New York school system outlined the history and program of the Conference on Food Service Directors, an Eastern group of school cafeteria managers who have met for two consecutive years. A committee has been appointed to consider the matter of a national association and to decide within the next three months what action it wishes to recommend. The committee is as follows:

F. O. Washam, Chicago, chairman; Grace Helene Miller, New York City; Berma Garrard, Atlanta, Ga.; Mrs. Alice R. Certain, Jacksonville, Fla.; Dr. Edith Loughridge, Louisville, Ky.; George H. Mueller, Kansas City, Mo., and Mrs. Bena Hoskins, Fort Worth, Tex.

An important problem of the committee will be to decide whether or not the organization will be an independent association or will hold its annual meetings in conjunction with the American Home Economics Association, the American Dietetic Association or the National Restaurant Association. An effort will be made to affiliate with the Eastern group of school lunchroom managers.



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Palmolive "Measured Soap" dispenser can be installed in a few minutes. Because it is made of solid chromium plated bronze, it lasts for years and never gives trouble.

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Buying soaps for building cleaning is really a specialized job. You'll find our manual, "School Cleanliness Problems," constantly helpful, and it will enable you to keep maintenance soap costs down to

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Of course your pupils get dirty . . . it's natural for them to do so with the greatest of ease. But do you know that the new Palmolive "Measured Soap" System makes "cleaning up" just as easy? In fact, it actually helps to promote healthful cleanliness.

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First, the dispensers. They're the most modern, up-to-date dry soap dispensers made. They do not leak, cake, corrode or get out of order. And, they can't be "drained"... for they accurately "measure out" just enough dry soap for one wash at a time, and no more. No waste!

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PALMOLIVE in a special free-flowing, non-caking form that instantly bursts into rich, creamy lather in any kind of water. It washes thoroughly yet assures your students' hands and faces all the gentle care of Palmolive Soap...the soap chosen exclusively for the world-famous Dionne Quintuplets.

30% TO 40% SAVING

Another thing you'll like about the Palmolive "Measured Soap" System is its economy. Because it accurately "measures out" the soap, it stops soap waste. Experience in hundreds of actual installations proves it reduces soap costs to only one one-hundredth of a cent per wash. This, experience shows, means a saving of 30% to 40%!

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THE NEW, ECONOMICAL DRY SOAP SYSTEM

Business Officials Focus on Problems

ISSOURI did some "showing" on its own account, with St. Louis acting host to the annual meeting of the National Association of Public School Business Officials. It was a happy choice for celebrating the convention's silver anniversary, and the opportunity of acquiring a speaking acquaintance with the city's widely heralded school system, plus a carefully balanced program, attracted a large audience. Some 300 members were registered by the end of the second day, with total attendance running 33½ per cent ahead of last year. Every state was represented and even parts of Canada.

Another headliner attraction was the exhibit — the biggest the association has ever sponsored. Some seventy-seven booths occupied all available space in the Hotel Jefferson. The only disappointment expressed throughout the entire week, in fact, was from would-be exhibitors who had waited too late. All space was gone by the first of last July.

Members and guests on hand for the opening were hardly registered before Charles L. Barr, supply commissioner; R. W. Hibbert, director of supplies and equipment, and Philip J. Hickey, secretary and treasurer of the board, serving as the local executive committee, had them whisked away to the famous Hadley Vocational School, there to inspect also the Educational Museum and the board's central depository and warehouse, shop buildings, garage and power house. From then on the pace was fast and furious, with sessions at the hotel headquarters and excursions planned to various school plants.

How St. Louis Maintains Equipment

To give the guests an insight into the operation of the St. Louis school system at the very start, Mr. Hickey described the methods used in financing the schools. Mr. Barr followed this with an outline of the lunchroom organization. Visitors were also introduced to George W. Sanger, commissioner of school buildings, who emphasized the need for landscaping. "Beautiful surroundings, pleasing architecture, artistic treatment of the interior and well planned landscaping," he said, "will inculcate in the impressionable youngster, through daily contact, good taste and esthetic appreciation which may not be fostered at home."

Much interest centered on St. Louis methods of maintaining school equip-

ment. Demonstrations of glazing in which, on a table designed and executed in the school's own shop, large sheets of glass were cut precisely and even a circle was produced in the twinkling of an eye drew applause from enthusiastic groups. Then there was the shade shop where, working in a limited area, one man supplies all the window shades for some 150 schools in the system. "Let's see how they handle this?" Or, "What do you do about that?" were questions heard frequently. Interchanges of experience followed as these tours of inspection progressed. Few, if any, did not jot down in their notebooks practical ideas to apply to their own needs.

Papers Have Practical Pitch

Official start of the sessions got under way the morning of the second day. when a large audience assembled to hear President Paul H. Scholz, business manager, board of education, San Antonio, Tex., deliver his address, after John S. Mount, vice president and inspector of accounts, State Department of Education, Trenton, N. J., had acknowledged talks of welcome from Lloyd W. King, state superintendent of schools, James J. Fitzgerald, president of the board of education, and Henry J. Gerling, superintendent of instruction. Annual reports presented by H. W. Cramblet, secretary, and Albert Austermuhl, treasurer, were followed by memorial tributes to deceased past presidents and tokens of esteem in the form of gold lapel buttons to living ex-presidents, delivered by Charles L. Barr. The program continued with a discussion of the merit type of teachers' salary schedule by Willard E. Goslin, superintendent of schools, Webster Groves, Mo., and a description of Detroit's control of the custodian-engineer force by L. H. Rich, director of the personnel department.

The whole pitch of the convention was practical, which in itself distinguishes it and recommends it to those business officials who would profit from others. The round tables got down to fundamentals — operating a school laundry, a summer program for custodians, the summer renovation program, handling supplies in a small city, the superintendent as business manager in a small city. These were but a few of the subjects discussed.

At the combined session in which reports were heard from the research and standing committees, similar basic problems were treated — fire inspections, ventilation in cold climates, when and how to inaugurate a central warehouse for supplies, and playground surfacing. In each instance the treatment was such as to provide constructive help.

Broader views on administering the school plant were not overlooked, however, as everyone will attest who heard about federal projects from H. F. Alves, senior specialist in state school administration, Office of Education; the business manager's functions in controlling a school budget as presented by Dr. John Guy Fowlkes, professor of education, University of Wisconsin, and minimum essentials for school business management in the average size city outlined by Dr. N. L. Engelhardt, professor of education, Teachers College, Columbia University. A panel on cooperation between the federal government and the states and their local governments in the support of public schools was another high spot in the week's program.

Accommodation at hotel headquarters made it possible to stage an unusually attractive exhibit. Representative concerns displayed their products effectively and to the apparent interest of the visiting schoolmen. All agreed that the response was encouraging.—R. P. S.

At the Helm for 1936-37

President

JOHN S. MOUNT, inspector of accounts, New Jersey State Department of Education, Trenton, N. J.

Vice President

R. W. Hibbert, director of supplies and equipment, board of education, St. Louis.

Secretary

H. W. Cramblet, secretary, board of public education, Pittsburgh (reelected).

Treasurer

Albert Austermuhl, secretary, board of education, Camden, N. J. (reelected).

Executive Committeeman

PAUL H. SCHOLZ, business manager, board of education, San Antonio, Tex.

Director

JOHN W. LEWIS, assistant superintendent and business manager, Baltimore Public Schools.

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This modern sink assembly reflects the Hamilton-Invincible policy of producing such equipment in related units wherever possible. It permits greater flexibility of arrangement, greater interchangeability of parts and service equipment.

This particular assembly includes five standard catalog units—but does not include the laboratory apparatus shown in the illustration. For detailed description of the units, please refer to Section 7 of the Hamilton-Invincible Catalog which has just come off the press. If you have not received your copy, write for it today.

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is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

MERCUROCHROME, H. W. & D.

(Dibrom-oxymercuri-fluorescein-sodium)

NEWS IN REVIEW

Construction Council

The National Council on Schoolhouse Construction held its fourteenth annual session October 5 to 8 in Austin, Tex., with President W. G. Eckles of Mississippi presiding.

J. Fred Horn of Texas presented Scott Gaines, assistant attorney general of Texas, who welcomed the nation's schoolhouse planners to the state. W. F. Cre-

dle of North Carolina responded for the

council and outlined the objectives of the organization.

Several delegates, including J. C. Baker of Arkansas, Alice Barrows of the Office of Education, Charles Bursch of California, J. B. Calhoun of Tennessee, Dr. W. W. Carpenter of the University of Missouri and W. F. Credle of North Carolina, reported on the status of schoolhouse construction from both federal and local funds.

Dean Henry L. Smith of the University of Indiana in an address on recent and anticipated changes in the educational program, pointed out that the program of the public schools has been extended downward to include the kindergarten and the nursery school, upward to include the junior college and adult education, and outward to provide many educational opportunities made necessary by the rapid changes in modern civilization. These changes, as Dean Smith pointed out, make it necessary to provide school-plant facilities far beyond the four bare walls of the little red schoolhouse.

Alice Barrows, U. S. Office of Education, spoke on the great need throughout the nation for additional school buildings to house children and youth not now in school and to rehouse thousands of pupils now accommodated in obsolete and unsuited quarters.

Prof. W. W. Carpenter, University of Missouri, emphasized the absolute necessity of the federal government and state governments taking some material step toward equalizing educational housing of boys and girls. He said that minimum physical facilities must be required and, if necessary, financed by the states and federal government to the end that every child will have an opportunity to attend school in a safe, sanitary, attractive and suitable schoolhouse. Teachers' colleges should include in their curriculums, he believes, courses on schoolhouse planning and use so that teachers, principals and superintendents may be adequately

trained in functional planning and school-plant hygiene.

S. L. Smith, director for the Southern office of the Julius Rosenwald Fund, presented data secured from the various states regarding federal aid for school-houses. Reports gathered from state officials indicate that the total schoolhouse construction program for the three-year period has reached the staggering estimated cost of \$750,000,000 and that government allotments in loans and grants amount to \$500,000,000.

The 5,133 PWA approved projects are estimated to cost a half billion dollars, of which amount the PWA loans and grants are approximately \$300,000,000 and the amount provided by boards of education approximately \$200,000,000.

The WPA program for the year, mainly for improvement and beautification of existing school plants, is estimated to cost \$140,000,000 including \$100,000,000 WPA grants.

The CWA and FERA programs for improvement of rural schools amounted to approximately \$150,000,000, including \$130,000,000 of government grants for labor and material.

The total number of schools built or improved and beautified is more than 80,000, Mr. Smith stated.

The council commended the federal government for making extensive school construction possible through the allotment of federal funds. It went on record as favoring a systematic, permanent federal policy of public works, including the erection of much needed school-houses to accommodate the thousands of children now crowded into inadequate and insanitary school buildings.

Officers of the council are: T. C. Holy, Ohio State University, president; W. F. Credle, North Carolina State Department of Education, vice president, and Ray L. Hamon, Peabody College, secretary-treasurer.

GIFTS

For the Faculty

Stipulating that the sum be used for the advancement of teaching, the late Samuel Hopkins, New York cotton merchant and cousin of the Mark Hopkins whose induction as president of Williams College 100 years ago is being commemorated this year, willed to the college \$2,400,000. The money will be put immediately to use expanding the number of faculty members, a move that in turn will mean new classrooms, library facilities, more leaves of absence for research, more pension funds and some additional administration funds, according to President Tyler Dennett. This long range expansion program, which will eventually cost three times the amount of the gift, will not in any way affect the size of the student body, which will remain at 800.

Fraternal Scholarship

A \$6,000 endowment fund, to establish the Annie Webb Blanton Delta Kappa Gamma Scholarship at the University of Texas, has been accepted by the board of regents. The fund is to be invested and its interest used as an annual stipend for the holder of the scholarship. Delta Kappa Gamma is an honorary fraternity founded by Doctor Blanton, who is a professor of education at the university.

FINANCE

Credit Union Expansion

All employees of the board of education of Evansville, Ind., and their families, are now eligible for membership in the Teachers' Federation Credit Union as the result of a change made recently in the organization's charter. There are now sixty-five members of the credit union, which hopes to reach a membership total of 500.

Variable

A variation of \$109.72 was found in per pupil costs in Noble County, Oklahoma. A survey recently conducted by Guy Lambert, county superintendent of schools, disclosed that the lowest cost per pupil was that of \$12.28 in one district, and the highest, \$122.00 in another.

Offers Board \$1,000; Rejected

Despite the individual efforts of one citizen of Luray, Va., to have that town's school year extended one more month, the schools will close as usual at the end of eight months. One thousand dollars was offered by this unnamed person to aid in the extension, but after estimating the cost of the additional month at \$3,000, and seeing no way to raise the other \$2,000, the school board rejected his offer.

\$30,000 Increase

An increase of 21 per cent of the difference between the amount they are receiving and the salary they should receive according to the scale in use at Hamilton County, Tennessee, has been voted for the county teachers. The total increase will amount to \$30,000.





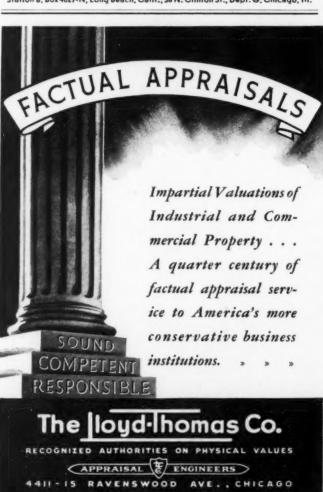
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INSTRUCTION

Four Years of Citizenship

Departing radically from the usual requirements for a bachelor's degree, Hobart and William Smith Colleges this year entered a new "must"—a four-year course in responsible citizenship. The course is planned to climax in the fourth year with all students concentrating on contemporary United States government. It is believed that this is the first time such a requirement has been set up in any college.

Highway Safety

A comprehensive program for the teaching of highway safety in New York State schools has been included in a report submitted to Governor Lehman by Dr. Frank B. Graves, commissioner of education. Doctor Graves cited the joint resolution of the legislature which requested the regents of the University of the State of New York to supplement safety education with particular reference to highway safety. It has been arranged at a conference of department of education representatives and Charles A. Harnett, commissioner of motor vehicles, to send statistical data from month to month to high school principals in the state.

BUILDINGS

Incentive to Learning

Fifteen acres of ground surrounding the high school now under construction for the Madeira School District at Madeira, Ohio, are being landscaped as a recreational park for educational and recreational activities. One of the principal features of the plan is an outdoor theater on a naturally wooded hillside where the audience will be separated from the stage by a moat created through a series of check dams. Trails and bridges will be laid throughout the grounds, and an artificial pond for ice skating will be constructed. A botanical garden, nature trail and arboretum will provide opportunity for botany classes to study plants in their natural habitat. Included in the plans are also a baseball diamond, tennis courts, handball courts, a quarter-mile cinder track and picnic areas with shelter houses and fireplaces.

Brookline Toll

Less than an hour after the final school bell had rung at Brookline High School, Brookline, Mass., fire broke out between the roof and the ceiling of the forty-fiveyear-old section of the school. About thirty teachers and fifty pupils were in the building at the time Ralph Totman, football coach, and Thomas E. Fitzgerald, mathematics teacher, discovered the fire and went through the three-story brick building spreading the alarm. Two secretaries in the office of headmaster saved valuable records by thrusting them into a fireproof safe as they ran from the building. Before the fire was brought under control, fifteen firemen had been injured, six seriously enough to need hospitalization. Although the actual fire loss was estimated at \$150,000, it will take between \$400,000 and \$500,000 to replace the accommodations destroyed.

Fireproof Duplication

Under the terms of the will of the late Charles D. Brainerd, the Phillips Academy, Danville, Vt., is to be replaced by a new \$45,000 structure, duplicating the architectural style of the front of the present building in stucco rather than in wood.

Ten for One

Ten condemned rural schools will be replaced by one township high school as a result of a special election held at Wantage Township, New Jersey. Two weeks before the favorable voting occurred, the proposal was defeated in a regular election. Maintaining that this defeat was the direct result of "untrue propaganda" circulated immediately before the first poll, the board called a special election. The accepted proposal calls for the construction of a \$180,000 building.

New Quarters

Opening its ninety-fifth year with an enrollment higher than it has been for the last ten years, Marion Institute, Marion, Ga., has found it necessary to add an addition to its junior college building and to its high school dormitory.

Emergency Measures

Faced with the knowledge that at any moment the Carpinteria Elementary School, Carpinteria, Calif., may collapse, the county school board has set up eight tents in which the 840 pupils of the school will attend classes. The construction of new buildings for the elementary and high schools has been under consideration for some time, with no particular progress made.

Light for Studying Measured

Measuring each pupil's room with a foot-candle measure to determine its lighting intensity in a recheck on this facility, Kemper Military School, Boonville, Mo., found that the average light for all of the rooms is about 33 foot candles. This the school considered a

satisfactory amount for average reading, writing and studying. During the rechecking, the lighting system of each room was studied with a view to improvement, and changes will be made in installations as recommended.

County Must Provide School

Notice has been served to the Robeson County board of commissioners, North Carolina, that a high school must be erected for the Pembroke Indian pupils now attending classes in the building that houses the State Cherokee Indian Normal School, and that the erection of such a school is not a responsibility of the state. Dr. J. E. Hillman, director of teacher training and certification, stated that conditions at the college are so crowded it is necessary to expand the plant, and that after the 1936-1937 school year it will be the county's obligation to have made provision for the high school pupils.

Half a Loaf

On the third revision of its building program, the Minneapolis board of education, attempting to reach a settlement with the city council and board of estimate, is offering to build a half a high school in the north section of the city, and a half a high school in the southwest district. The construction of half schools will lower the program's costs about \$1,000,000.

ANNIVERSARIES

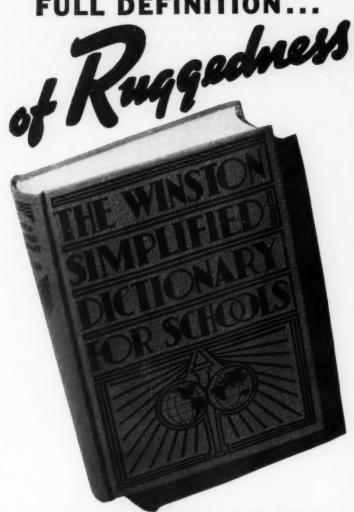
Education Week Publicity

Special material for the publicization of American Education Week, November 9 to 15, has been prepared by the National Education Association and is available to schools. Stickers, to be used on correspondence and for place cards at Education Week luncheons are printed in black on orange and carry in silhouette a father, mother and son approaching the entrance of a school. Another item is a blue and orange poster, about 111/2 by 17 inches. Small pamphlets carrying a graphic message through the use of sketches are also available and may be sent to homes and distributed at public meetings.

Book Fair

Bookmaking, from manuscript to bound volume is to be portrayed at the book fair to be held by the New York Times in the International Building at Rockefeller Center, November 5 to 19. A panoramic display of the world of books is planned, with new books, children's books, rare books and manuscripts, a model bookshop, and a series of lectures by well known authors. The

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Boys Have Science Show



Pupils in chemistry and physics at Governor Dummer Academy, South Byfield, Mass., put on an annual science show.

exhibit will be open in the morning to school children accompanied by teachers and school librarians. In the afternoon it will be open to the general public.

Books to Grow on

Book Week is being celebrated November 15 to 21. The theme selected this year is "Books to Grow on—the Modern World for Young Readers." The wide range of books available on contemporary themes, which give children an excellent historical and factual background in transportation, science, history, geography, exploration, art and government, will be the subject of programs and exhibits during the week.

Trees to Mark 150 Years

The 150th anniversary of the Constitution of the United States will be celebrated next year with tree planting ceremonies as one of the outstanding features. The American Tree Association has recently published a booklet containing Washington's address to the Congress in convention, Sept. 17, 1787, the constitution, notes on the constitution, amendments, a section of the report of the Sesquicentennial Commission to Congress bearing on tree planting, and explicit directions for the planting of trees.

Statue of Mann

A second casting from the original model for the statue of Horace Mann, which stands in the statehouse grounds at Boston, was presented to Antioch College by Hugh T. Birch, an alumnus who as a boy knew Mann, at the two-day conference, October 16 and 17, which officially opened the celebration of the Horace Mann Centennial Year. Mann was the first president of the college.

MEETINGS

Broadcasting

Eighteen national organizations in cooperation with the U. S. Office of Education and the Federal Communications Commission will sponsor a National Conference on Educational Broadcasting to be held December 10 to 12 in Washington, D. C. This meeting will serve as a clearing house for information on the latest technical and professional developments in the educational use of radio.

The program will include such topics as schools of the air, radio music, speech and drama, religious broadcasts, forums on the air, organization of listening groups, radio workshops, broadcasting to schools, use of radio programs by colleges and universities, use of radio by libraries and museums, radio programs for children, problems of research in educational broadcasting, audience attitudes, educational broadcasting in other countries, organizing the community on behalf of a radio station, and others.

Sponsoring organizations are: American Association for Adult Education; American Council on Education: American Farm Bureau Federation; General Federation of Women's Clubs; Jewish Welfare Board; International Council of Religious Education: Institute of Education by Radio; Institute of Radio Engineers; National Advisory Council on Radio in Education; National Association of Educational Broadcasters: National Catholic Educational Association; National Committee on Education by Radio; National Congress of Parents and Teachers; National Education Association; National Grange; Progressive Education Association; Women's National Radio Committee, and Workers Educational Bureau of America.

Dietitians

Among the 1,000 dietitians who attended the American Dietetic Association meeting in Boston, Oct. 11 to 16, were a considerable number who were specialists in school feeding, and to their needs the program gave recognition.

A round table on the school lunch was presided over by Constance Hart, director of school lunchrooms, Rochester, N. Y. Gertrude Middletown of Philadelphia told delegates how dietitians in school and college dining halls arouse interest in nutrition.

Dr. Mary deGarmo Bryan of Teachers College, Columbia University, declared that the school cafeteria affords a great field for the dietitian. The health education possibilities of the cafeteria were emphasized, including the feeding of the malnourished and the keeping of all children fit. Sound business management is essential in the school cafeteria, Doctor Bryan reminded her listeners.

Visits about Boston and the surrounding towns were arranged. Of special profit to the school feeding group was the tour of college dining halls. At Harvard, a central kitchen and bakery serves the dining halls of five houses, each accommodating some twenty-five or thirty students. The college dining halls and kitchens of Wellesley College were visited, including a cooperative dormitory.

Scientists

The section on education of the American Association for the Advancement of Science will hold its annual meeting in Atlantic City, December 28 and 29, according to William S. Gray of the University of Chicago, secretary. Three sectional meetings, a joint program and the annual dinner with the section on psychology have been planned.

PUBLICATIONS

Facts and Figures

"For Minnesota Schools — Facts and Figures," a 64-page booklet published by the Minnesota Education Association, is designed particularly for informing its own membership. An informed membership, the association believes, will greatly aid in the advancement of its legislative and professional objectives. Maps, charts and tables help to point up the simply worded objectives.

Social Studies Edition

A separate social studies edition of Scholastic has been announced by its publishers. There will be two editions each week, a regular, for teachers of English and those who combine and integrate English and the social studies, and a social studies edition for classes demanding a detailed study of social and economic problems. There has been no increase in price.

Cranbrook News

The first issue of the first volume of the Cranbrook News Bulletin appeared in September. The bulletin is printed on eight pages of ivory colored paper and

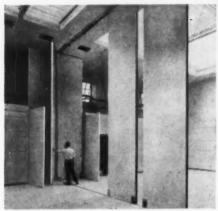
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will be published four times a year. This issue contains the commencement address given by Dr. S. S. Marquis in June, news of the opening of the intermediate school in conjunction with the academy, a summary of future Christ Church Cranbrook events, a description of the new science building, and notes of Brookside, Kingswood and Cranbrook Schools, Bloomfield Hills, Mich.

HEALTH

Dangerous as Ever

The traffic accident record for 1936 of persons from 5 to 24 years of age continues unfavorable. For children under 5 the number of accidents remains about the same as in recent years. A considerable reduction in the number of deaths from traffic accidents has taken place among persons of 25 years of age or older.

Snellen Test Type

Roused by the attempts of some commercial interests to introduce the use of complicated devices for the determination of the vision of school children in the state of Illinois, the members of the eye, ear, nose and throat section of the Illinois State Medical Society recently introduced a resolution before the house of delegates of the society. The resolution strongly recommended the use of the Snellen test type because (1) it is superior to any other method; (2) it is inexpensive, and (3) it is simple.

It was the general opinion of the section that at the present time no other visual acuity test is as satisfactory as the use of the Snellen test type. The resolution asked that the recommendation be sent to the department of health of the state, with the request that it be transmitted to the local health departments of the villages, towns and cities, to the superintendents of schools of counties and larger cities, to the heads of teachers' colleges, state normal schools and parochial schools.

RADIO

Listener Tastes

Instructive radio programs do have popular appeal, it has been found through a listeners' survey made by the University Broadcasting Council.

Listeners to the educational programs sponsored by the council prefer the unaffected and sincere delivery of an educator to the suave voice of the so-called professional broadcaster by a ratio of 35 to 1. They are interested in a person of authority who speaks with conviction.

While it uses dramatization and conversation, the council finds that its public has no serious prejudice against the lecture. It can be very efficient when well executed, and is at its best in presenting maximum content in minimum time.

Most popular of its programs are the round table discussions, for which the participants no longer use either script or notes. They get together half an hour in advance of the broadcast and talk over the substance of their program. For one such discussion the council received 6,000 unsolicited letters asking for copies.

Experimental Programs

In the belief that, properly used, radio can become a more important instrument of education than the printing press, Joseph M. Sheehan, associate superintendent of schools, New York City, asked the board of education for \$5,000 this fall to finance experimental programs. As the result of a survey he conducted, Doctor Sheehan concluded that educational broadcasting in this country has failed to keep up with the improvements made in technical processes.

"Educational broadcasting still remains amateurish on the air, largely because of the fact that the channels on the air are to a great extent held by commercial interests. Education on the air has been largely incidental and unorganized." he said.

New York City has been offered time on the air by Station WNYC for educational processes, and it is Doctor Sheehan's plan to select outstanding teachers to draw up a series of broadcasts related to the regular school curriculum. A test of the effectiveness of these programs would be made through the use of twenty schools designated to receive them.

Air College Courses

Courses in Spanish, French, farm accounting, national government, news writing, and understanding the child are being offered this fall by the Michigan State College of the Air through Station WKAR. These courses are provided to extend an opportunity to all who wish to continue their work in education, and although no credit is given for the work, all instruction is by members of the college faculty. Lesson outlines and materials will be supplied to those who regularly enroll.

A Thousand Can Be Wrong

One thousand frequently mispronounced words have been assembled for the use of the radio class in pronunciation and diction being conducted by Gail E. Densmore, associate professor of speech at the University of Michigan. Each Wednesday, from 2:15 to 2:45 this course is broadcast over WJR. It deals with the correct pronounciation, exact meaning and interesting derivations of the words listed, and will give similar consideration to more literary words and expressions in current usage, which the average vocabulary should include. Copies of the list of a thousand words together with any further instructions or reference lists that may be issued during the course may be obtained for six cents in stamps to cover postage.

VISUAL EDUCATION

Survey Finds Scarcity

Found poorly equipped with motion picture projectors, film supplies, radios and other audio-visual aids necessary for the transmission of knowledge and ideas with the effectiveness now possible, the 280,000 public and private schools in this country were necessarily condemned as overlooking the most important possibilities now available in the way of teaching resources, according to a survey recently completed by the U. S. Office of Education and the American Council on Education.

However, it was found that in spite of this evident scarcity of equipment, radio and motion picture education is being woven more and more into the modern school curriculum. The growth in the number of schools using radio programs and motion pictures has been rapid, and larger school systems especially report a greater use of all types of audio-visual teaching.

Park Pupils Film Silas Marner

Probably the first full length silent film produced by any school is that of Silas Marner, recently completed by the members of the drama club of the Park School, a private progressive school at Baltimore. When the club decided to film a motion picture, it was with the intent of producing some dramatic incident in from 300 to 400 feet of film. Of the five scenarios submitted, however, the one on Silas Marner was so fine that it was decided to undertake the more difficult task.

Forty-five pupils took part in the production of the film, which was made with borrowed 16-mm. equipment. The creation of an eighteen century atmossphere presented some difficulty, but a church and some stone houses were located at Oella that could be utilized, and a basement near Pikesville provided an interior for Marner's home. The fire-place in which he concealed his money

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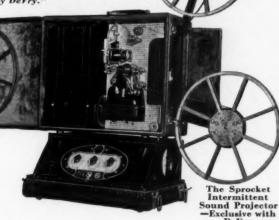
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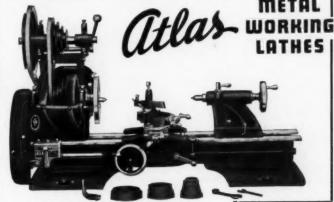
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Films for the School Screen

XV-Argentina and Brazil

Argentina — Portrays this South American republic as essentially agricultural. Covers Patagonia, a region of sheep grazing; the arid uplands, which produce sugar cane and grapes; the pampas, natural grazing grounds; the Transandean railroad; port cities of Bahia Blanca and Buenos Aires, and the Victoria Falls of the Iguassú. 1 reel. 16 mm., silent. For rent or purchase. Teaching Films Division, Eastman Kodak Company, Rochester, N. V.

Rollin' Down to Rio and Under the Southern Cross—A motion picture voyage along the East Coast of South America. 1 reel. 16 mm. and 35 mm., silent. Transportation charges only. Munson Steamship Line. Distributed by Dynamic Pictures, 729 Seventh Avenue, New York City.

Brazil — A picture built upon the concept that international understanding is the foundation of world harmony. A visit to Rio de Janeiro reveals its beauty and its unusual social and cultural advantages. A trip up the Amazon permits study of industrial and wild life. 2 reels. 16 mm., silent. For rent. The Religious Motion Picture Foundation, 140 Nassau Street, New York City.

Brazil I — Amazonian Lowlands. Locates the immense drainage basin of the Amazon River. Shows the wild life, native Indians, jungle products — Brazil nuts and wild rubber—and the cities of Manáos, Santarem, Belem. 1 reel. 16 mm., silent. For rent or purchase. Teaching Films Division, Eastman Kodak Company, Rochester, N. V.

Brazil II — Eastern Highlands. Outlines the principal agricultural and industrial products of Eastern Brazil — coffee, cacao, cassava, sugar, tobacco, pineapples, silk and shoes. Shows São Salvador, São Paulo and Santos, the coffee centers, and Rio de Janeiro, the capital. 1 reel. 16 mm., silent. For rent or purchase. Teaching Films Division, Eastman Kodak Company.

People Who Live on a Great Plain—Influence of the region on human development; life on the pampas, great fertile plains; contrasting old and new methods of ranching; equipment; stock; cattle and sheep ranching; wheat and corn farming; general survey of Buenos Aires; life and industries. 1 reel. 16 mm. and 35 mm., silent. For rent or purchase. International Educational Pictures, Inc., 40 Mount Vernon Street, Boston.

was in a house on Maryland Avenue. With no outdoor stage sets, the club had to wait until the snow fell on campus to film Molly's death. Summer and fall scenes were taken at the proper season of the year, and the film was assembled, to win high commendation upon its showing.

Texas Filmed

The natural resources of Texas and the Big Bend National Park Project are the subjects of a new one-reel silent motion picture prepared under the direction of the National Park Service and the Bureau of Mines. The first part of the picture uses animated photography to illustrate the enormous area of Texas in relation to the rest of the United States, the location of its six principal gas and oil producing areas, the U. S. Bureau of Mines' helium plant and the location of the principal sulphur producing areas of the state. This is followed by views of the Texas State Parks and a tour through the Big Bend National Park Project, which covers 736,-000 acres of land. Copies of the film in either 16 or 35-mm. size may be obtained from the U.S. Bureau of Mines, Experiment Station, Pittsburgh, or the National Park Service, Department of

the Interior, Washington, D. C. No charge is made for the use of the film, except for transportation.

Catalogue of Available Films

The fall and winter listings of Motion Pictures of the World, 1936-37, has been released by International Educational Pictures, Inc., Boston. All of the films listed in this catalogue are available nationally, through a clearing house service conducted by the publishers. Transportation, sports, science, religion, nature, industry, history, foreign talkies, entertainment, biography, art and all countries are among the subjects listed.

NAMES IN NEWS

New Superintendents

DR. ROBERT T. BAPST, associate superintendent in charge of secondary schools, Buffalo, N. Y., has been appointed superintendent of Buffalo schools to succeed DR. ERNEST C. HARTWELL, now principal of the State Normal School, Brockport.

PAYNE TEMPLETON, principal of the high school at Flathead, Mont., has been elected superintendent of schools at Helena, Mont., succeeding R. O. Evans.

T. M. McCullough, coach and principal at Stigler, Okla., has been appointed superintendent of schools at Tahlequah, Okla.

HOWARD PERRIN, principal of Benton High School, Benton, Ark., was named superintendent of schools to fill the vacancy made by the tragic death of OTHO H. WILKERSON.

DONALD E. PRATHER, superintendent of the Trumbull Consolidated Schools, Trumbull, Neb., for nine years, has been appointed superintendent of schools at Edgar, Neb., where he succeeds C. Wells Grandy.

New Principals

Charles I. Raffensperger, principal of the high school at Biglerville, Pa., has been named principal of the Juniata Joint High School at Mifflintown, Pa. He will be succeeded at Biglerville by L. V. Stock, assistant principal of the school for thirteen years. Charles S. Yost, director of music at the school, was named assistant principal.

DONALD PIERCE COBB, principal of the Somerset Academy, Athens, Me., has been appointed principal of the high school at North Berwick, Me.

R. R. MILLER, superintendent of schools at Bloomville, Ohio, has been appointed principal of the high school at Linton, Ind.

LAURENCE B. LANE, principal of the high school at Sardinia, N. Y., has been made principal of the East Pembroke High School, East Pembroke, N. Y.

TROY H. PRICE, social science instructor at Gulfport High School, Gulfport, Miss., has been made principal of the school.

Aubrey H. Snow, has been appointed principal of Sangerville High School, Sangerville, Me. He has been principal of Howland High School, Howland, Me., for the last five years.

New Presidents

Dr. Henry Merritt Wriston, president of Lawrence College, has been elected president of Brown University to succeed Dr. Clarence A. Barbour, who resigned because of poor health. Doctor Wriston, who will take office about February, is the eleventh president of Brown, and the first not a clergyman of the Baptist denomination. He is affiliated with the Methodist Episcopal Church.

Dr. F. Marion Smith, pastor of Trinity M. E. Church, Springfield, Mass., has been elected president of Evansville College, to succeed Dr. Earl E. Harper, who resigned early this year.

Dr. H. W. James, director of the school of education of the Alabama State College for Women, has been ap-



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pointed president of the New Mexico State Teachers College.

Dr. RAY FIFE, supervisor of agricultural education in the Ohio department of education for fifteen years, has been appointed president of the New Mexico State College of Agriculture.

JOHN VAUGHAN, state superintendent of schools for Oklahoma, was appointed president of Northeastern State Teachers College. He will be succeeded in his state office by A. I. Grable, director of the school of correspondence study at Oklahoma Agricultural and Mechanical College.

Dr. Stewart Grant Cole was inaugurated on October 17 as the ninth president of Kalamazoo College, Kalamazoo, Mich.

College Departments

DR. ALVIN W. SCHINDLER, formerly of the University of Iowa and Adams State Teachers College, has been appointed associate professor of education at the University of Denver. He will fill the vacancy created by the departure of Prof. George L. Maxwell, who becomes assistant director of the adult education in the Office of Education.

LESLIE A. BUTLER, formerly superintendent of schools in Grand Rapids, Mich., has been appointed professor of school administration at Michigan State Normal College.

CLARENCE HOPE has been appointed specialist in elementary education in the department of education of the New Mexico State College.

Miscellaneous

LAWRENCE K. FRANK, formerly associate director of education of the General Education Board, has been appointed assistant to Dr. Ludwig Kast, president of the Josiah Macy, Jr., Foundation, New York City.

WILLIAM G. KIMMEL, editor of the Social Studies, has joined the staff of the John C. Winston Company as associate editor. Mr. Kimmel has been an associate in civic education in Teachers College, Columbia, and for five years previously was executive secretary of the social studies investigation of the American Historical Association. From 1927 to 1929 he was supervisor of social studies for the education department of New York State.

Dr. Arvid J. Burke, Teachers College, Columbia University, has been appointed director of public information service with the New York State Teachers Association, a newly created position.

J. MIKE McCoy, superintendent of Cedar County, Neb., schools, has been elected president of the Interstate Spelling Association, which covers Iowa,

On the Air During November

The following programs of particular interest to school people are arranged by the National Broadcasting Company, the Columbia Broadcasting System and the Mutual Broadcasting System. The time is Eastern Standard Time.

Daily

National Farm and Home Hour¹—12:30-1:30 p.m. (NBC-WJZ).

Wilderness Road-5:45-6:00 p.m. (CBS).2

Monday

American Education Forum—2:00-2:30 (NBC-WEAF).

History Series-2:15-2:45 p.m. (CBS).

Nov. 2-Baltimore.

Nov. 9-Milwaukee. Nov. 16-Buffalo.

Nov. 23—Rochester.

Nov. 30-Galveston.

Conversation Concerts, music by Bach and Debussy played by E. Robert Schmitz, pianist, 3:30-4:00 (CBS).

Children's Songs, Stories and Novelties, Dorothy Gordon—4:15-4:30 p.m. (CBS-WABC).

Safety Musketeers, talk, music and dramatization, U. S. Office of Education—4:00-4:15 p.m. (CBS).

Education-in-the-News, U. S. Office of Education—6:00-6:15 p.m. (NBC-WEAF).

Tuesday

Music of Famous Men and Women Series-2:15-2:45 p.m. (CBS).

Nov. 17-Sidney Lanier and Friedrich Nictzsche.

Literature Series-2:15-2:45 p.m. (CBS).

Nov. 10-King Richard the III.

Nov. 24-Romeo and Juliet.

Science Service Series, Watson Davis, editor-2:15-2:30 p.m. (CBS).

Have You Heard? (Introductions to fascinating corners of natural science) U. S. Office of Education—3:45-4:00 p.m. (NBC-WJZ).

Medical Emergencies and How They Are Met, dramatized program, American Medical Association—5:00-5:30 p.m. (NBC-WEAF).

Nov. 3—Community Sanitation, Dr. Morris Fishbein, editor, Journal of the American Medical Association and of Hygeia.

Nov. 10-Noise, Dr. Morris Fishbein.

Nov. 17-Football Injuries, Dr. Morris Fishbein.

Nov. 24—Be Thankful, Dr. W. W. Bauer, director, bureau of health and public instruction, American Medical Association.

News of Youth, junior news dramatization—5:15-5:30 p.m. (CBS).

Science in the News-6:00-6:15 (NBC-WEAF).

Wednesday

Geography Series—2:15-2:45 p.m. (CBS).

Oct. 14-Gibraltar (Intermediate).

Nov. 4-North vs. South in Norway.

Nov. 18-Sweden.

Nov. 25-Denmark.

Growth and Development of the Child, National Congress of Parents and Teachers in cooperation with the American Academy of Pediatrics—4:00-4:30 (NBC-WJZ).

Nov. 4—Growth of Infants, Harry Bakwin, assistant professor of pediatrics, New York University College of Medicine.

Nov. 11—Growth of the Adolescent, Horace Gray, clinical professor of medicine, Stanford University.

Nov. 18—Growth of Organs, R. E. Scammon, distinguished service professor in the graduate faculty, University of Minnesota. Nov. 25—Our Ancestors, E. A. Hooton, professor of anthropology, Harvard University.

Cavalcade of America, dramatization of significant moments in American History— 8:00-8:30 p.m. (CBS).

Thursday

Academy of Medicine—2:30-2:45 p.m. (CBS). Music, Literature and Science Series—2:15-2:45 p.m. (CBS).

Nov. 5—Jason and the Golden Fleece (Intermediate), and Singing Around the World (Primary).

Nov. 12—In Which Direction Does Air Exert pressure, and Holland in Music and Song (Primary).

Nov. 19—Beowulf (Intermediate), and Thanksgiving Day in Song (Primary).

Friday

Music Appreciation Hour, under the direction of Walter Damrosch. Series A and C, 2:00-2:30 p.m., alternating weekly; Series B and D, 2:30-3:00 p.m., alternating weekly. (NBC-WEAF, WJZ).

Vocational Guidance and Current Events Series —2:15-2:45 p.m. (CBS).

Nov. 6-Extinction of Certain Occupations, and Current Events.

Nov. 13-The Rise of New Occupations, and Current Events.

Nov. 20—New Trends in the Occupational World, and Current Events.

Cincinnati Symphony Orchestra-2:45-4:30 (CBS).

General Federation of Women's Clubs Series-2:45-3:00 p.m. (NBC-WJZ).

Saturday

Cincinnati Conservatory of Music, directed by Alexander von Kreisler—11:00-12:00 (CBS). Magic of Speech—11:30-12:30 p.m. (NBC-WEAF).

Sunday

Beethoven and Chopin Sonatas, played by Alexander Semmler, pianist—10:30-11:00 (CBS).

The World Is Yours, Smithsonian program— 11:30 a.m.-12:00 m. (NBC-WJZ).

University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).

Pittsburgh Symphony Orchestra, directed by Antonio Modarelli—2:00-2:45 p.m. (CBS).

New York Philharmonic-Symphony Orchestra, directed by John Barbirolli and guest conductors—3:00-5:00 p.m. (CBS).

Ford Sunday Evening Hour, Fritz Reiner, conductor—9:00-10:00 p.m. (CBS).

Guest Artists: Nov. 1, Harold Bauer, pianist; Nov. 8, Lily Pons, coloratura soprano; Nov. 15, Jose Iturbi, pianist; Nov. 22, Richard Crooks, tenor; Nov. 29, Ezio Pinza, basso.

General Motors Concerts, Erno Rapee, conductor—10:00-11:00 p.m. (NBC-WEAF).

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K. S. McKee, principal of the high school at Elkins, W. Va., and county superintendent of schools, has resigned to accept the post of dean at Potomac State School, Keyser. He succeeds DEAN FRANK MAUZY, resigned.

H. B. Bradbury, superintendent of schools at Gallia County, Ohio, was elected president of the Southeastern Ohio School Superintendents Association. R. N. EYMAN, superintendent of Fairfield County schools, was elected vice president; O. E. HEARING, superintendent of Perry County schools and past president of the organization, was made secretary, and C. W. MALLETT, superintendent of Morgan County schools, was chosen treasurer.

PAUL E. ELICKOR, principal of Newton High School, Newtonville, Mass., assisted by PROF. C. W. BUSH of the University of Delaware, is visiting schools in New England and New York as a part of the field work of the Cooperative Study of Secondary School Standards. Frank C. Jenkins, director of teacher training, Mississippi State Department of Education, assisted by John P. Lozo, formerly principal of Senior High School, West Reading, Pa., is working in Ohio, Michigan and Indiana. PAUL REHMUS, high school principal at Battle Creek, Mich., assisted by W. I. IVERSON, formerly superintendent of schools at Pullman, Wash., is visiting schools in Minnesota, North and South

Dakota, Nebraska, Iowa and Wisconsin. F. L. STETSON, professor of education, University of Oregon, assisted by J. E. WORTHINGTON, high school principal at Waukesha, Wis., began work in North Dakota and Nebraska and will continue through Colorado, New Mexico, Utah, Wyoming and Montana to the Pacific Coast. In addition to the men named, a local educator in each state is to be added to the committee for the study of the schools in his state.

THE RT. REV. BERNARD JAMES BRAD-LEY, president of Mount St. Mary's College, Emmitsburg, Md., for twenty-six years, died of pneumonia at the age of

DR. NATHAN ALLEN PATILLO, dean of Randolph-Macon Woman's College for twenty-nine years, died at Lynchburg, Va., after an illness of several weeks. He was sixty-nine at the time of his death, the oldest member of the faculty in point of service.

DR. HERBERT BROWNELL, chairman of the department of secondary education Teachers College, University Nebraska, since 1910, died recently.

KATHERINE PETTIT, founder of the Hindman and Pine Mountain settlement schools in Kentucky, died recently. Miss Pettit received the Algernon Sidney Sullivan Award in 1932 for "high thought and noble endeavor" for her service to Kentucky mountaineers.

DR. JOHN W. BARTON, president of

Ward-Belmont, Nashville, Tenn., died recently at the age of forty-three.

CHARLES A. CRANDALL, superintendent of schools at Birmingham, Mich., died Oct. 5, after an extended illness. HOWARD D. CRULL, director of personnel, has been made acting superintendent.

DR. HIRAM W. DODD, superintendent of schools at Allentown, Pa., and a former president of the Pennsylvania State Teachers Association, died of a heart attack in a hotel room at Atlantic City.

JUDSON CARL JENKINS, superintendent of schools at Dawson Springs, Ky., for twenty-eight years, died at the age of fifty-seven, following a brief illness.

DR. MARTIN S. BENTZ, superintendent of schools at Cambria County, Pennsylvania, died recently after an illness of five weeks. Doctor Bentz became county superintendent in 1911, and was granted the degree of doctor of philosophy for his work in improving the schools in his county by St. Francis College in 1922.

JAMES E. ARMSTRONG, principal of the Englewood High School, Chicago, for thirty-seven years until his retirement in 1929, died recently. He was eighty-one years of age. Mr. Armstrong was responsible for the construction of the first two gymnasiums in Chicago, and for the installation of the first city school lunchroom, which he induced the school board, with the aid of the Parents' Club, to place in Englewood High.

In the State Departments

C. V. McKee, E. R. Jobe and D. R. PATTERSON have all been given appointments in the Mississippi State Education Department. Mr. McKee, who has been superintendent of schools at Pontotoc, for ten years, has been named state elementary school supervisor to succeed J. T. CALHOUN. Mr. Jobe, who has been appointed state high school supervisor to succeed S. B. HATHORN, was superintendent of schools at Hazlehurst. Mr. Patterson, superintendent of schools at Ruleville, is now director of teacher training and certification, at which he succeeds Dr. Frank Jenkins.

DR. ROBERT G. BERNREUTER and DR. W. RAY SMITH have been appointed to positions with the Pennsylvania Department of Public Instruction, while DORR E. Crosley, who had a position with the department, has resigned. Doctor Bernreuter, assistant professor of educational psychology at Pennsylvania State College, has been made chief of special education in the bureau of education of the department, and Doctor Smith, principal of Evansburg Borough Schools, Butler County, has been appointed chief of the personnel examinations division. Mr. Crosley, director of the bureau of

Coming Meetings

ov. 4-6—North Dakota Education Association, Grand Forks.

Nov. 5-7—Colorado Education Association, simultaneous meetings at Denver, Pueblo and Grand Junction.

Nov. 5-7-Iowa State Teachers Association, Des Moines.

Nov. 5-7-Minnesota Education Association, St. Paul.

Nov. 6-7—Kansas State Teachers Associa-tion, simultaneous meetings at Topeka, Salina, Hays, Garden City, Hutchinson, Winfield, Coffeyville and Fort Scott.

Nov. 9, week of-Delaware State Education Association, Wilmington.

Nov. 11-14-Missouri State Teachers Association, Kansas City.

Nov. 12-14—Arizona State Education Association, Tucson.
Nov. 12-14—West Virginia State Education

Association, Huntington.

Nov. 18-16—New Jersey St
Association, Atlantic City. State Teachers'

Nov. 16-18—Association of Land-Grant Colleges and Universities, Washington, D. C. Nov. 19-20—Illinois City Superintendents' Association, Springfield.

Nov. 19-21-Louisiana Teachers Association,

Monroe.

Nov. 22-25—South Dakota Education Association, Rapid City.

Nov. 25-26—Virginia Education Association, Richmond. Nov. 26-28—Texas State Teachers Association, Fort Worth.

Dec. 15—American Vocational Association, San Antonio, Tex.

Dec. 10-12-National Conference on Educational Broadcasting, Washington, D. C.

Dec. 12—Delegate Assembly, Nebraska State Teachers' Association, Omaha. Dec. 28-30-Illinois State Teachers Associa-

tion, Springfield.

Dec. 28-30—Pennsylvania State Teachers Association, Harrisburg.

Jan. 18—National Committee on Education by Radio, New York City.

4-6-Oklahoma Education Association, Tulsa.

Feb. 17-20—American Council of Guidance and Personnel Associations, New Orleans.

Feb. 20-25—Department of Superintendence, National Education Association, New Orleans.

eb. 20-25—American Physical Education Association, New York City. Feb. 25-27—Progressive Education Association, St. Louis.

eb. 26-27—American Association of Junior Colleges, Dallas, Tex.

eb. 27—National Advisory Council on School Building Problems, New Orleans. pril 7-10—North Central Association of Colleges and Secondary Schools, Chicago. April 21-24—American Physical Education Association, New York City.

March 18-20-F -Florida Education Associa-

May 7-8—American Council on Education, Washington, D. C.

June 27-July 1-National Education Association, Detroit.

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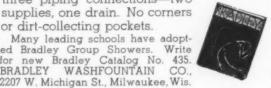




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administration and finance, resigned to take part in an educational survey of Philadelphia.

KENNETH BEATH, state supervisor of adult education for Oregon for the last two years, has accepted a position as assistant professor of industrial arts at the University of Louisiana. George BIRRELL, who has been a county supervisor of adult education during the past year, will succeed Mr. Beath.

MARGUERITE KASTRUP has been appointed state supervisor of sight-saving schools in Northwestern Ohio.

ROBEN J. MAASKE, who for the last five years has been a member of the Oregon State Department of Education directing the supervision of rural schools, has taken a year's leave of absence to accept a fellowship in the graduate school of the University of Minnesota. JOHN M. MILLER, instructor at the Eastern Oregon Normal School at La Grande, has been temporarily appointed to Mr. Maaske's position.

Vocational Education Committee

The committee appointed by President Roosevelt to study federal aid for vocational education in its present aspects and to formulate resolutions regarding its future values is headed by DR. FLOYD REEVES, professor of education at the University of Chicago. Representing labor on the committee are JOHN P. FREY, secretary-treasurer of the metal trades department of the American Federation of Labor, LIEUT. Gov. THOMAS KENNEDY of Pennsylvania and ELIZABETH CHRISTMAN, secretary of the National Women's Trade Union League; representing agriculture are HENRY C. TAYLOR, director of the Farm Foundation of Chicago, and Dr. EDMUND Brunner, professor of rural education at Columbia University; representing home economics is ALICE EDWARDS of the Home Economics Association; representing industry are ROLAND ALLEN, Indianapolis, and T. J. THOMAS, Chicago; representing construction is John H. ZINK, Baltimore; representing education are the REV. GEORGE JOHNSON, Washington, D. C., and Dr. Arthur B. MOEHLMAN, professor of education, University of Michigan, and editor, The NATION'S SCHOOLS; representing vocational rehabilitation is HENRY ESBERG, New York City, and representing the government are Oscar Chapman, assistant secretary of the interior; KATH-ARINE F. LENROOT, director, children's bureau, Department of Labor; MORDE-CAI EZEKIAL, Department of Agriculture; ERNEST DRAPER. assistant secretary of commerce, and Gordon R. CLAPP, director of personnel, Tennessee Valley Authority.

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3

School Executives and Architects are invited to visit the offices of The NATION'S SCHOOLS in Room 1221 of the Architects Building. A special conference room has been arranged for any convenience they might wish. The many exhibits and features of the building will be introduced to them if desired.

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EIGHTEENTH anniversary of the Armistice is November 11 (Wednesday).

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Inscription on the Tomb of the Unknown Soldier at Arlington Cemetery, Washington, D. C.

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Writers' Project No. 2

Guidebook all gathered, what will be WPA writers' project No. 2? We suggest bringing Mother Goose down to date. Here's a tempting possibility: "Shoe the old horse, shoe the old mare; shoe the little footies of your chair, chair, chair."

Imaginative as she was, Mother Goose never dreamed of a day when furniture would wear shoes. Give, then, a WPA writer a catalogue from the Darnell Corporation, Long Beach, Calif. He will care not who writes the laws of a nation. if he can only write songs of desk shoes, chair glides and furniture casters.

School executives make up one large group that will willingly sing the praises of Darnell products. Wrecked floors, wracked furniture, noise and possible accidents don't appeal to them; this new Mother Goose might.

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The school principal, moreover, seems to employ these modern marvels without inflation of the ego: another surprise for Mr. Gump.

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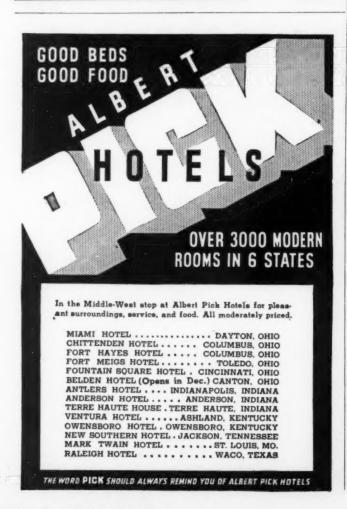
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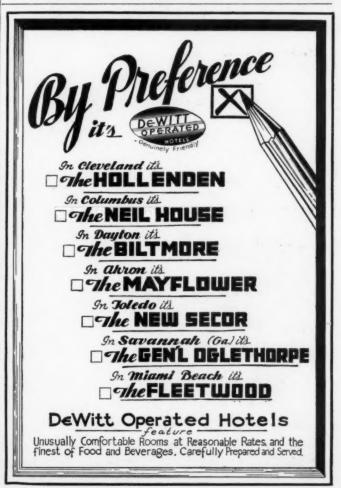
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THE BOOKSHELF . . .

Remedial and Corrective Instruction in Reading. A Program for the Upper Grades and High School. By James Maurice McCallister. New York: D. Appleton-Century Company, Inc., 1936. Pp. xviii+300. \$2.

Reading, considered especially an elementary school subject, is here treated sanely for the secondary school as a remedial and corrective program. It may be generally classified not only as a good but a most timely book, essential to any secondary school administrator who has been troubled by these skill deficiencies.

Music Appreciation: Its History and Technics. By Percy A. Scholes. New York: M. Witmark & Sons, 1935. Pp. xix+398. \$4.

Teachers of music and curriculum specialists will find in this conservatively written volume stimulation and much of value for their work in this rapidly popularized fine arts activity.

THE DISCUSSION OF HUMAN AFFAIRS. By Charles A. Beard. New York: The Macmillan Company, 1936. Pp. vii+124. \$1.75.

A noted historian waxes philosophical in an entertaining fashion with special reference to history. Worth reading.

Enriched Curriculums for Small Schools. By Knute O. Broady. Lincoln: Teachers College and the University Extension Division, The University of Nebraska, 1936. Pp. xvi+249. \$1.75.

Announcing a revolutionary series in small school administration of which the first volume hardly approaches the prefatory enthusiasm of the editor. There are numerous suggestions that are valuable to small schools but no new principles of management have been developed. There is a strong selling talk for correspondence courses.

THE FIRST HUNDRED YEARS OF ST. MARY'S HALL ON THE DELAWARE. A Century of Private School Education for Young Women Under the American Episcopal Church, 1837-1937. By Helen Louise Shaw. Vardley, Pa.: The Cook Printers, 1936. Pp. xv+167. \$2.

Interesting and sympathetic treatment of a venture in female education under the direction of the Episcopal Church. The Evaluation of Higher Institutions. VI. Administration. By John Dale Russell and Floyd W. Reeves. Chicago: The University of Chicago Press, 1936. Pp. xx+285.

An attempt to prepare standards of appraisal for institutions of higher learning.

PHILANTHROPY AND LEARNING. WITH OTHER PAPERS. By Frederick Paul Keppel. New York: Columbia University Press, 1936. Pp. 208. \$1.75.

A foundation executive presents in a series of smartly written, loosely related chapters his thoughts and impressions on the effects of philanthropy on education.

CONSUMER COOPERATION IN AMERICA. DEMOCRACY'S WAY OUT. By Bertram B. Fowler. New York: The Vanguard Press, 1936. Pp. viii+305. \$2.

Story of the growth of a new movement in America following the pattern already set in the Scandinavian countries. The enthusiasm of the author imparts an inescapable thread of unusual optimism to the entire presentation.

Peace or War: The American Struggle, 1636-1936. By Merle Curti. New York: W. W. Norton & Company, Inc., 1936. Pp. 374. \$3.

Democracy's struggle against war is told interestingly by a capable historian. So important is this book in its realistic orientation of this vital problem that it should quickly find its way into school libraries and hence to the classroom. Can be easily used in upper secondary levels.

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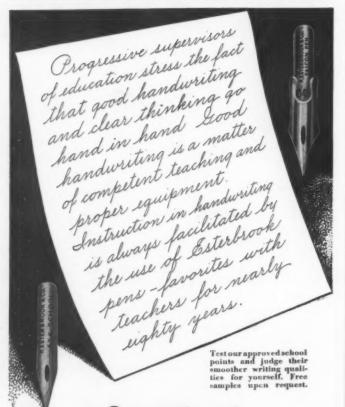
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THE WORLD'S GREAT AGE: THE STORY OF A CENTURY'S SEARCH FOR A PHILOSOPHY OF LIFE. By Philo M. Buck, Jr. New York: The Macmillan Company, 1936. Pp. xv+382.

With fervor generated by belief leavening the ordinary tendency, toward acute scholarliness an attempt is made to orient the nineteenth century as the great age of change through interpretation of its literature. Stimulating and vigorous.

THE LAST ROMANS. A Tale of the Time of Theodosius the Great. By Theodore Jeske-Choinski. Foreword and Archeological Note by G. Barry O'Toole. Pittsburgh: The Pittsburgher Printing and Publishing Company, 1936. Pp. xiv+460. \$1.75 paper binding; \$2.50 cloth binding.

Presented in English for the first time is this adaptation of Jeske-Choinski's unusual historical novel of the fourth century. Produced in 1897, it has long been read on the Continent. The rendition is a beautiful and masterly piece of prose writing which fascinates and thrills.

Just Off the Press

FINGERS THAT TALK. A Typing Book for Children Eight to Eleven Years of Age. By Ralph Haefner. Illustrations by Henry John Stahlhut. New York: The Gregg Publishing Company, 1936. Pp. 122. \$1.

THE DEVELOPMENT OF AMERICA. By Fremont P. Wirth. Boston: American Book Company, 1936. Pp. Lxviii+772.

How to FIND AND FOLLOW YOUR CAREER. Straight Thinking on Career Planning. By William J. Reilly. New York: Harper & Brothers Publishers, 1936. Pp. xiii+161. \$1.75.

THE PACIFIC AREA AND ITS PROBLEMS. A Study Guide, edited by Donald R. Nugent and Reginald Bell, with chapters by Walter G. Buckisch, Franz Melandy and W. H. Williams. New York: The American Council, Institute of Pacific Relations, 1936. Pp. 234. \$1.35.

SURVEY MANUAL FOR THE BUSINESS ADMINISTRATION IN PUB-LIC SCHOOL SYSTEMS. By N. L. Engelhardt and Fred Engelhardt. New York: Bureau of Publications, Teachers College, Columbia University, 1936. Pp. xvi+156. \$1.90.

A WORKBOOK FOR OBSERVATION IN PRACTICE TEACHING. By John Harvey Furbay. New York: The Macmillan Company, 1936. Pp. ix+261. \$1.50.

ORAL INTERPRETATION OF FORMS OF LITERATURE. By Margaret Prendergast McLean. New York: E. P. Dutton and Company, Inc., 1936. Pp. xx+380. \$2.50.

ROMEO AND JULIET. By William Shakespeare. Motion Picture Edition. Illustrated with photographs. New York: Random House, Inc., 1936. Pp. 290. \$2.

WILLIAM SHAKESPEARE. A Commentary. By M. R. Ridley. New York: E. P. Dutton and Company, Inc., 1936. Pp. vii+195. \$0.65.

MODERN RELIGIOUS DRAMA IN GERMANY AND FRANCE. A Comparative Study. By Margaret Hayne Harrison. Boston: The Stratford Company, 1936. Pp. xxiii+236. \$2.

FIERCE-FACE. The Story of a Tiger. By Dhan Gopal Mukerji. Illustrated by Dorothy P. Lathrop. New York: E. P. Dutton & Co., Inc., 1936. Pp. 76. \$1.50.

THE PREVENTION AND CORRECTION OF READING DIFFICUL-TIES. By Emmett Albert Betts. Evanston, Ill.: Row, Peterson and Company, 1936. Pp. xiv+402. \$2. For quantity orders, \$1.50.

COMMONSENSE GRAMMAR. By Janet Rankin Aiken. New York: Thomas Y. Crowell Company, 1936. Pp. ix+341. \$2.

RETROSPECT AND FORECAST IN RADIO EDUCATION. By Levering Tyson and William J. Donovan. Chicago: The University of Chicago Press, 1936. Pp. iv+28. \$0.25 (paper

READING READINESS. By M. Lucile Harrison. Boston: Houghton Mifflin Company, 1936. Pp. vii+167. \$1.20.

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Side Glances -

ANUARY will bring a new year and a new volume, some new names and energies on our rotating board of editors and consultants, a more closely knit type page (giving some 6,000 extra words per issue) and twenty-odd topnotch contributions from schoolmen of all varieties and complexions.

Let's look hastily over next month's fare and see if it tempts the appetite.

OUSING is an essential to full recovery in the educational field. Will it be new construction or modernization? In January, as in this issue, one can take his pick. There will be a description of the new senior high school at Corvallis, Ore., a plant that gives particular emphasis to vocational subjects. Many of the rooms have been built for a specific type of work, but classroom units and special rooms with their supporting walls have been so planned that they can be easily enlarged or decreased in size to accommodate a changing curriculum. Supt. H. W. Adams, with the help of many fine photographs, tells a detailed story of the building and its equipment.

At Kearney, Neb., there was a need but no money for a new high school building. The best the board could do was to vote \$17,000 from current funds for modernization. PWA contributed \$7,000. All the construction work took place while school was going on. Harry A. Burke, superintendent of Kearney schools, will describe the whole remodeling scheme.

HAPHAZARD

methods are gradually being replaced by system, in school bus service. The superintendent of District 89, Centralized Schools, Grover, Colo., is C. C. Moore. Mr. Moore will answer a great many

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questions on rural school transportation in the next issue, such as: Who should be responsible for transportation policies. How are routes best planned? What determines the driver's fitness? Can time schedules be maintained? What provision is there for determining weather conditions?

ACAMELLIA

boutonnière — if you've never worn one, just wait until February. Down New Orleans way, where you'll be going to the Department of Superintendence meetings, there will be a blossom in every buttonhole, if Supt. Nicholas Bauer of the public schools has his way. Mr. Bauer has some pages, which he shares with President Threlkeld, for boosting New Orleans and he does make the mouth water with his Creole menus and romantic excursions. President Threlkeld matches these gastronomic delights with the intellectual tidbits of his program.

MEXT month's medal for valor goes to Dean Lobaugh, the high school principal at Pendleton, Ore. He will present a plea for the masculinization of teaching, looking toward the day when men will predominate the profession as thoroughly as women now do.

"S-S-H, your father is playing with the Boston Symphony." The scene is the Jones family living room. Mr. Jones, in shirt sleeves, is seated before the radio spiritedly sawing on his 'cello, while Mrs. Jones strives to silence their romping offspring.

Some 80,000 boys and girls in Michigan and throughout the North Central States may play with the Boston Symphony on Saturday evenings, but on certain days each week they rehearse under Joseph E. Maddy of the University of Michigan, who broadcasts music instruction from Detroit and Chicago stations.

Supt. Charles B. Park of Reading, Mich., will describe this project in the January issue from the standpoint of his own school system.

	Small Schools Can Be Good Schools						
Indoctrination? No! Educators should attack not defend the principle of indoctrination, thinks I. W. HOWERTH, professor of sociology, Colorado State College of Education, Greeley, who does it here to good effect.							
The Gentle Art of Guidance							
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LOOKING FORWARD

Education Is Recovering

A T NO time since the effects of the depression were first felt by the public schools has the teaching profession been more optimistic concerning the future than during the past few months. The Department of Classroom Teachers, never noted for excessive enthusiasm concerning the economic condition of its members, stated in its 1935-36 report that: "Teachers are more optimistic now than at any time since depression days."

There is a definite reason for the increase in morale. High spot reports from various fact-gathering organizations, from our own sampling and from information gained through direct contacts with superintendents of schools, indicate that significant recovery from depression budgets, in all areas except that of capital improvement, was apparent in 1936-37 budgets. The emergency of the depression has been passed. Horizon indications are that fairly general recovery to predepression levels is almost certain in the 1937-38 budgets which will be prepared next spring.

These generalizations must not be considered as inclusive of all areas. Quick recovery was naturally made in places in which the basic organization was sound and in which states have made intelligent provision for changing conditions. Taken as a whole recoveries are in the areas that normally possess large purchasing power. Submarginal areas and submarginal states do not present so rosy a picture. Here fiscal support is still deplorably weak. It is also apparent that little permanent relief can be expected until certain fundamental problems relating to administrative and general tax reorganization are definitely solved. Some few states may be incapable of meeting their basic educational problems without general federal aid. In general, however, the Department of Classroom Teachers is fully justified in its optimistic attitude.

The most neglected and one of the really important areas is that of capital improvement. There is practically no possibility here for a return to required budgets, an estimated annual total of \$660,000,000, until both state and federal governments examine this need realistically not only in terms of pressing educational requirements

but in its relation to stimulating permanent recovery in the building industry. School building must be considered as part of the program of national economy and as essential to the stabilization of industry. While total figures for the calendar year are not yet available, it is doubtful from examination of a series of partial reports whether the sums spent or contracted for in building will reach one-half of the essential total. When it is further considered that at least one-half of actual expenditures represent long time borrowings, there is little room here for great enthusiasm.

Early recovery in the capital expenditures field is essential to full educational recovery. Appropriations for this purpose must be supplied by the state and federal governments. If the government through PWA would allocate \$300,000,000 to the states, subject to the raising of a similar sum by the states, recovery could be quickly made. No new legislation would be required and the funds could be supplied on the basis of need as determined by state and local survey. Local school districts would not find it necessary to plunge into further debt and could slowly work off their present burdens. Distressed districts with heavy need, unable to borrow further, could be helped. Essential housing for children now inadequately cared for could be provided.

If local districts will realize that only through this means can real recovery in the school plant field be made their representations to state and federal governments should result in fairly quick action.

Horace Mann Centennial

NINETEEN THIRTY-SEVEN is the Horace Mann centennial year in American public education. Just 100 years ago, on July 1, 1837, this then relatively unknown lawyer resigned from the state senate to accept the poorly paid secretaryship of the first Massachusetts State Board of Education. From that time until 1848, he went tirelessly and enthusiastically from town to town in Massachusetts and other states preaching the doctrine of public education free and open for all.

The Massachusetts system of public education had fallen into a relatively low state 100 years ago. Horace

Mann not only had to combat the lethargy of the Massachusetts people, who with complaisant superiority refused at first to believe that improvement was really necessary, but also the inertia and the antagonism of the teaching profession. His struggle with the Boston schoolmasters, finally culminating in the survey of 1845 and real victory, is sufficient evidence of the bitterness of the struggle.

Horace Mann's leadership was rapidly carried into other states. In 1830 only Massachusetts, Maine and New Hampshire had free elementary schools. When he left his educational position in 1848 to become an antislavery Whig for a single term in Congress, his ideas had received such extensive response and support in the Northern section of the country that the public school was firmly established in fact, at least through the elementary years.

For his significant contributions to the United States system of free public education Horace Mann has been fittingly named the father of the American public school.

The celebration during 1937 of this historical movement, which started in October with a memorial celebration at Antioch College of which he was also president, is not only fitting as an appreciation but may be almost as significant a date for current education as was the original year.

Public education in the United States is at the crossroads. Within the next year at the latest the profession and the people in each state must determine whether the states and the people thereof are to maintain full control over the educational process or whether the present movement toward the federalization of education will continue and finally result in bureaucratic control in Washington, operating through an executive federal department. The Horace Mann centennial year must not be neglected.

Campaign in Retrospect

With the presidential campaign safely out of the way it is possible to view in retrospect some of the advantages and disadvantages of bringing public educational problems into the heat of partisan controversy.

If the really vital problems confronting education could have been discussed by both candidates in terms of their meaning to education and the democratic process of government, the people of the United States might have been stirred to definite action or at least given a significant education in respect to needs. Others may feel that in the multiplicity of problems confronting the people in this major campaign it would have been impossible for public education to have received national consideration. Whatever the desirability, the fact remains that education was dragged into the campaign with confusing results.

Education was discussed largely in terms of what

each side purported to be the candidate's beliefs and practices. Governor Landon was pictured by his opponents as the indifferent spectator at excessive curtailment of educational opportunity in Kansas. It was assumed that he might reasonably have been expected to step into the breech and attempt to reverse the Kansas state policy with respect to state subventions. His friends and supporters pointed out that he really was the champion of local control of the educational process in accord with our time-honored tradition. They pointed with pride to this policy which they claimed was responsible for the low percentage of illiteracy in Kansas. Here they neglected to state that these records were based on the results achieved in predepression days. Finally, Governor Landon was pictured as the close friend and supporter of public education.

Turning to the Democratic side, President Roosevelt was pictured by his campaign committee as the savior of public education during dark depression days. The committee pointed with considerable pride to the large appropriations made out of emergency funds for schoolhouse reconstruction; for emergency experimental activity in preprimary and adult education fields; to active support through CWA, FERA and WPA of rehabilitation programs; of the employment in large numbers of surplus teachers who, desperate because of unemployment, threatened the stability of the teaching profession, and to subventions to worthy youth through NYA. The popular success of CCC camps and educational programs under TVA were pointed to with pride. In fact, after reading all the campaign propaganda, it seemed as if the Democratic candidate's entire time had been devoted to the solution of educational problems.

However, President Roosevelt's opponents carefully pointed out that he has set a bad example to local school boards by paying unemployed teachers mere relief wages, thereby weakening a profession already on the verge of disorganization. They accused him of attempting to federalize public education and of placing educational administrative responsibility in nonprofessional hands. They pointed out that through indirect aid the principle of undivided school support had been abrogated and that specific aids to the school plant were given only because schools represented a socially defensible expenditure for public monies.

Objective analysis of the claims and counter claims of both candidates and their supporters indicate that the complete truth lay in neither camp. It is very, very doubtful whether impartial analysis of deeds and alleged misdeeds would give sufficient evidence to damn one or enthrone the other. The emotions and distortions that naturally accompany these struggles for high political office, the progressive interpretation by uninformed laymen of only partial evidence in both cases, stated however in the most assured and dogmatic manner, did not make for truth.

No one yet knows what the exact truth is. The records

are not clear or complete. Neither candidate's record with respect to education is significantly clear for final labeling. Candid analysis leads to the conclusion that both candidates, because education is not primarily a political issue, have given only the most casual and generally indifferent attention to the activity. There is nothing derogatory to either gentleman in this conclusion. It is the natural political reaction to a field of problems that has been, and should continue to be, treated as a non-political and fundamental cultural problem.

The general conclusion is that dragging the public school problems into the presidential campaign in an effort by both sides to secure what must be euphonistically called the "teacher vote" was not particularly helpful to the campaign, to the teaching profession or, what is of most importance, to public education itself.

Glass Partition Walls

THE function of the school window is to furnish natural lighting, to allow sight of the outside world, and to act also as an equalizing area between the artificial inside and the natural outside climates. Since relatively high skill in the glass industry permits the production of thin plate glass that possesses not only the quality of permitting unblurred vision but also unusual tensile strength, the window area is one of the weak spots from the standpoint of heating and humidifying. It is frequently necessary during the cold months to equalize temperature differences of eighty degrees. Unless this factor has been specially provided for in the development of the heating plant, the window area in classrooms is a drafty and uncomfortable spot. If the proper amount of humidity is provided the windows are generally partially or completely fogged. Only in far Northern cities has this difficulty been overcome by the use of storm or double sash. In general this annoyance is accepted as routine or else humidification is stepped down to inadequacy.

The advent of the glass brick in this country has been hailed by some engineers and architects as the solution to this vexing problem. These translucent bricks can be easily and quickly set in cement, simplifying structural operations. No sash need to be adjusted and no extra caulking or sealing operations are performed. The glass bricks furnish a more diffused and less glaring light than plate glass and are sufficiently thick to solve the annoying radiation problem. However, despite claims to the contrary, it is still necessary to use interior shades or blinds to control the light.

Glass bricks do not permit vision of the outside world, which is psychologically and esthetically one of the fundamental values of a window. They possess no flexibility and the building is therefore completely dependent on mechanical ventilation at all times. There are numerous sections in this country where open window ventilation in schools is desirable at all times of the

year. There are other sections where natural ventilation should be used in spring and fall. Glass bricks must therefore be judged negatively with respect to their use as window substitutes in schoolhouse construction. This statement does not mitigate against their use in factories or offices. They appear to enhance the architectural value of the factory while they actually decrease the total effect of the school.

There is a distinct place for glass brick in school construction that has not yet been considered. In building for flexibility the walls between classrooms and other units must be considered as merely temporary screens. They may be changed quickly whenever need arises. These end partition walls might easily lend themselves to the use of glass brick. Selection of this material would effect a savings in manual operations and materials involved. Instead of laying up a wall of tile, applying at least two coats of plaster and two coats of paint on either side, a minimum of five operations plus upkeep, it is possible to lay up the wall in one operation. It is also easily removed and set up quickly in another location. It is entirely possible that the savings on manual operations would more than overcome the higher cost of the glass brick. Extended use of this material for walls should also result in definite and necessary price reductions as production and use are extended.

Legislative Programs

FORTY-Two state legislatures will meet shortly after the beginning of the new year. One of the most important problems before each popular assembly is appraisal of the conditions and needs of public education. In many of these states professional organizations, state departments of public instruction and cooperating committees of laymen have already formulated comprehensive programs based on intelligent survey of actual conditions. While the pressure of a great emergency emotional drive, such as existed in 1933 and 1935, is absent, possibility for more objective and rational study of needs is greater. Whether the absence of a seething emotion will tend toward indifference on the part of legislators is difficult to predict at the present time.

Programs for increased school support which have grown out of cooperative action by the major interests within a state or for which strong local public opinion has been created as a result of local education will in general enjoy much more success than those plans which are merely projected on the legislature from above through a pressure lobby. The rejection or failure of these plans must not be blamed irrationally upon indifference or antagonism in these cases but rather to faulty methodology by the teaching profession.

The Editor



The lighted school

Let's All Go to School

By H. S. HEMENWAY

HE average American defends the public school with almost a holy zeal. In general, he not only believes in an education as a desirable attainment for everyone, but he also feels that every child should go to school regardless of home finance, cultural background or handicaps of a mental or physical nature. Therefore, he has been ready to provide elaborate buildings, fine equipment and a well trained teaching personnel in order that every child in every backwoods hamlet may have brought to him at least some of the advantages which only contact with learning can give. America to him would not be a land of opportunity and freedom without public schools.

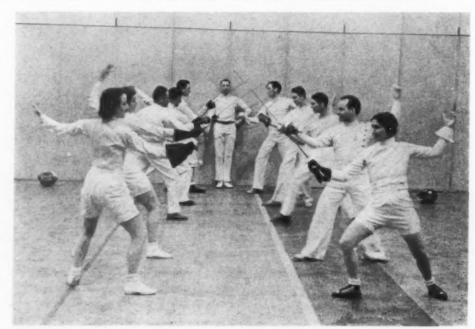
However, the school, with the exception of a few nights a year, is reserved for the activities of the immature; children alone need to continue to study. Magnificent school plants over the country, costing collectively billions of dollars to build and having equipment worth additional millions, for a great amount of time — nights, holidays and vacation periods — lie idle. Adults are seldom seen, other than in the rôle of parents,

within the doors of the public school.

The fact that education should be a continuing process from the cradle to the grave, that the buildings and equipment provided at public expense can be made a center of adult growth and recreation, has not received wide acceptance in America. Most adults through their contacts with the workaday world realize gaps in their preparation for living which need be filled, but strangely enough they seldom turn to the agency best fitted to help them — the public school.

Believe it or not, there is one community in which the school plant has become the adult community center, in which the school board realizes that its buildings and equipment render complete service only when they are used a maximum amount of time, in which there has been established an Opportunity School for exclusive use of the adults of the community and-here lies the strangest fact of all - in which accurate enrollment records show that for the last five years more adults have been enrolled in the adult school than there are children in daytime attendance!

No account is taken, so far as the number of adult enrollments is concerned, of the attendance of more than 18,000 at the Sunday afternoon lectures or of the hundred-odd thousands who were spectators at the vari-



Fencing classes are popular among Shorewood men and women.

ous adult athletic events. These are the simple facts: the average yearly enrollment in adult classes for the last five years is 2,877, while the enrollment of children in kindergarten through senior high school averaged 2,702 over a similar time.

Shorewood, Milwaukee, is the town in which the Opportunity School flourishes. Far from being a community in which "English for Foreigners" would be a leading class for adults, it has been populated with the suburban type of city dweller. Its lakeside residences compare favorably with the best in the Milwaukee area, while the rest of the square mile and one-half of residential territory has homes representing the prosperous middle classes. It is a village exclusively of homes and small service stores - a residential suburb of the better type with a population of 16,000 inhabitants.

There are two boards of education in Shorewood as in each Wisconsin city; one, the day board, controls the usual school activities connected with the education of children, and the other, the vocational board, has under its direction the training of the few children who drop out of high school and also of the education of the adults of the community. As the "day" board of education appoints the "night" board, and as the superintendent of schools is ex-officio a member of the night board sufficient correlation of the work of the two boards is maintained so that duplication of effort or conflict of authority is amicably resolved.

As this dual system has been in operation in Shorewood over a period of fifteen years, certain principles of operation have been developed. Among these are the following:

1. The adult school program should appeal to all ages and all types of previous education. How successful the school has been in this respect may be found in the report of Director Harvey Genskow. Of those enrolled, 44.7 per cent give their ages as between eighteen and thirty years and about one half (48.5 per cent) between thirty-one and fifty years.





Golf, drawing, shopwork, cooking—anything is taught in Shore-wood evening schools, if enough people want it. For an academic study, twelve persons must sign up in advance; for a gymnasium activity, twenty-five; for dancing or social activities, thirty.





Only 1.4 per cent are below eighteen years and 5 per cent over fifty years. Three-fourths of the students have completed high school, one-fourth college, and nearly 10 per cent have received some graduate training.

2. The teacher is the most important factor in a successful night school program. The question is always asked: "Do the regular instructors of the high school teach in the evening school?" While there are some notable exceptions, such a combination of work is generally deemed inadvisable, owing to the fact that the instructor is tired at the end of the day, and also that the finest teachers of children are not always the best teachers of adults. A different technique of instruction has to be used.

In any large center of population certain individuals stand out in their profession. Many individuals are interested in passing on to a group of people, similarly inclined, the many fine points of their professional or avocational life. Among these outstanding individuals in the area they represent may be found the ideal teachers for an evening school. A noted architect gives a course on house planning, a lawyer on business and real estate law, a club woman on parliamentary law, two professionals train groups in golf, and a noted painter of murals teaches a course in drawing and sketching.

3. The school gives recognition to the recreational aspects of community life. Seventeen lectures were presented to Sunday afternoon audiences averaging more than 1,000 people last year. A volunteer collection defrays about one-third of the cost. Kitten ball played under lights is a summer attraction for old and young. More than 100,000 spectators attended last summer. Admission is charged on two nights only. Ice hockey, volley ball, indoor baseball, swimming, fencing, boxing, tap dancing, rhythmics and basketball offer sport for all.

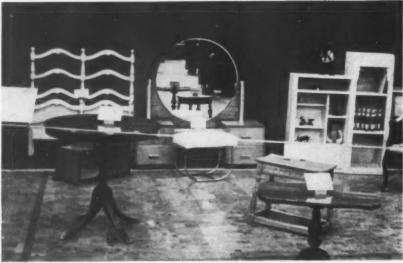
4. The work of the school is more largely avocational than strictly vocational, although both types of courses are offered. Of approximately 100 courses and activities offered by the Opportunity School only eight come within the classification "vocational."

5. Community members are the sole judges of effective class work,

but certain courses must be self-sustaining financially. Board members may be prejudiced against some offering such as an a cappella choir, tap dancing, bridge, or golf, but the community demand is the determining factor in presenting the course. As a further precaution, the vocational board demands that certain courses be self-sustaining so far as finance is concerned. These include tap dancing, bridge, golf and social dancing.

6. The school attempts to give equal attention to all the fine arts. Even though community members choose their class work, it is the aim of the school to give equal attention to all of the fine arts. At present there are eleven classes in music, including a cappella choir, band, harmony, appreciation, piano, violin and chorus. In art there are two appre-





On the theory that every one needs an avocation, many of these courses are offered. Professional men find relaxation in hand work for the home. Young and old of both sexes flock to instrumental and vocal music classes. The amateur photographer gains ideas from fellow students as well as instructor.

ciation classes, applied arts, art metal, drawing or sketching, interior decoration, photography and woodworking.

It is a curious fact to record that in classes where principles of design underlie and dominate the work, the interest continues year after year. For example, a class in woodworking failed as such. However, when the principles of design were applied in a course on period furniture, the class became so large that additional sections were formed. The auditorium was completed only within the last few months, but already four groups are arranging the staging, costuming and production of plays for children and adults, which may well lead to a large following for a people's theatre. The Little Theatre movement is in its infancy.

7. Whenever it may be shown that sufficient enrollment can be obtained to justify the establishment of a class in a subject a teacher for such a class will be found and the work will be offered.

The enrollment necessary for the establishment of a class differs with the type of work offered. For academic study the minimum is twelve; for gymnasium activity twenty-five is desirable, whereas for purely social contacts an enrollment of thirty or more is necessary.

Adults are quick to sense the worthwhileness of a course, and consequently one effective means of discouraging the teacher who is not efficient is the establishment of these minimum attendance standards and prorating the salary paid the teacher whenever enrollment does not justify the continuation of the class. Certain teachers readily attract enrollments of fifty or more in their classes and make mandatory the offering of new sections for the same course. Some instructors present their work in such an unorganized form that the class membership quickly vanishes.

As all new classes are "on trial" until enrollment develops and the prospective teacher has to attract the minimum number before any salary payment has been made, the school can afford to be liberal in its offerings of untried courses. That such a policy often produces unusual results is shown by the fact that a course in the speaking voice was begun as an experiment. Ten sections taught by the same teacher were a part of the evening school offering just one year later.

8. The schools shall be open without cost for any legal meeting. Shorewood schools belong to the taxpayer. Why not reduce the costs of the organizations which are sponsored by taxpayers by opening the schools free of charge to Shorewood organizations that have a general community program? The Women's Club, American Legion, Cooperative Club, and Association of Commerce, all hold meetings in the school at some time during the year.

The services of the high school cafeteria are available to the group

at a "per plate" charge, which just defrays expenses. Meals are served at prices dependent on menus offered at from 25c to 80c, with the average price at 55c.

Whenever some organization in Shorewood desires to use the schools for activities at which admission is charged — for example, an entertainment or a bridge party — the actual additional expense of operation is paid by the organization making the reservation.

To any individual who has not seen a school of this type in action, the choice of activity given the students would seemingly necessitate high costs. As a matter of fact, quite the reverse is true. Certain classes, as has been mentioned, are wholly self-sustaining; others are conducted on a low rate of expense, the dollar enrollment free practically paying the entire cost. On most classes, under the state laws of Wisconsin, about 30 per cent of the teacher's salary is returned to the school in the way of state aids.

The day school charges the night school only such operating expenses as are over and above the necessary day school expenditures. This includes such costs as heating, lighting and supplies used. The average tax levy for the last five years has been slightly in excess of \$19,000, the average tax rate 61c per \$1,000 assessed valuation. In other words, the average taxpayer with a home assessed at \$6,000 has paid \$3.66 for class work, recreation and Sunday afternoon lectures.

With the changing aspects of modern civilization which force every individual periodically to "catch up," with the great investments in school buildings and equipment remaining unused during a large part of the year, with the paramount need of everyone's securing community contacts and an understanding of governmental problems, the opening of school buildings for adult activities where "Everyone Goes to School" should be the next outstanding development of the great American public school system.



A Day of Student Control

By RALPH VAN HOESEN

HE primary purpose of education in a democracy is to develop the ability of pupils to live happily, successfully and efficiently. One of the vital factors in this development is effective experience in assuming responsibility. For this reason, school authorities are justified in making provision whereby pupils may have this opportunity on as wide and as interesting a scale as possible. Student Control Day, one day each semester on which the Senior A group assumes the responsibility for the full control of the school, represents such an opportunity.

During the first semester of last year, a committee from the senior A class met with the principal to discuss the project of a student control day.

Training for the Day

The plan was approved by principal, teachers and seniors, and the next step was to set up the details of the plan. This was not an easy task because it required the selection and training of seniors to assume the teaching duties in forty-five classrooms, to assume the duties of student guides in the halls and to take over the duties of the counselors, or session room teachers, of the dean of girls or assistant principal, and of the principal.

One of the main points in the plan was that the teachers should not be in the classrooms at any time during the day. At the close of the day, each senior filled out a questionnaire that had been prepared.

During the second semester the senior A class without any outside suggestion brought up and voted almost unanimously to carry on the project again. The details were carefully worked out by the class and three advisers. The same general plan of the preceding semester was

followed, although a few of the errors made previously were corrected.

Each regular teacher trained one or more seniors to handle his classes. The feeling that only a few of the teachers should be in school during the day was expressed. For this reason it was decided to allow those teachers who so desired to have a visiting day. About one-half of the staff took advantage of this opportunity.

From the Other Side of the Desk

Two questionnaires were constructed. One of these was to be filled out by each senior a day or so before student control day and the other one at the close of the day. The first questionnaire contained items, such as the subjects to be taught or positions to be filled, whether or not the seniors were in favor of the project, their attitudes toward the teaching profession and the value they expected to derive from the day's activities. The second questionnaire was somewhat more detailed with the following statements to be checked:

- I enjoyed my teaching: (a) Very much..... (b) Some..... (c) Not at all.....
- 3. Are you in favor of student control day next year? Yes
- 4. Has your attitude toward the teaching profession changed? Yes.....
 No
- If your attitude has changed, what is it now? (a) Against (b) Indifferent (c) Enthusiastic
- What was the attitude of the pupils with whom you worked? Very cooperative Fairly cooperative Not cooperative
- 8. List all the constructive suggestions for improvement for next year.

The results obtained were quite satisfactory. Many of the statements made by the pupils are extremely interesting. A few of the typical ones are given. "I learned the attitude people take when they have a chance to cooperate." "I realize the strain and responsibility placed on a teacher." "I learned that a teacher's job is not an easy one and that she has every right to be looked up to and respected by her pupils." "I received the satisfaction of knowing just exactly what our teachers go through when teaching their pupils." "I experienced the difficulties in leadership." "I found teaching to be interesting and not routine work, as there is a lot of diversion." "The real value, I think, obtained from today's experience was just the opportunity to see how a school is run from behind a desk, stepping out momentarily from a position of pupil to that of teacher. It gives one an entirely different perspective of the school as a whole, makes one realize what a really large organization it is, and makes one realize the unlimited influence the teacher has over future generations." "I understand the position of the teacher better. My interest in teaching has become more enthusiastic." "Found out I would not like to be a teacher."

What Is Gained

Although I have no definite data upon which to rely, I am tempted to list a few things that appear to result from such an activity.

The pupils see the necessity for organization. They are brought into closer contact with the faculty members. It gives an opportunity for a large group to have the experience of cooperating toward making a project of general interest successful. While it means extra work for the faculty members, it provides an opportunity for many of them to have a visiting day without interrupting the routine.

If there is a carry-over value to such a project, it appears that this one has the beneficial result of creating the right attitude toward the teaching profession.

Democracy's Five Demands

Upon Our American High Schools

By CHARLES W. TAUSSIG

EMOCRACY is founded on the belief that the mass judgment of the people is sufficiently sound to direct its political authority. Such theory must of necessity presuppose that the social and political education of the people in some measure keep pace with the advance in science, technology and economics. It must of necessity presuppose a development in the self-discipline of the individual if he is to participate intelligently in the ever-growing complexities of national life.

There are emotional and intellectual reasons why the volcanic upheaval in Europe has created a situation in our own country which, although not immediately or generally critical, has brought about a crisis in several phases of our national life, most notably in education.

Viewed from the emotional angle, we must remember that we have among our 130 million citizens, 25,361,186 less than two generations removed from their European fatherlands, of which 5,264,289 are German, 2,756,453 are Italian, and 336,373 are French, and the balance from other countries, most of which are in the throes of major governmental crises. The emotional reverberations in this country cannot be ignored.

The Masses Must Catch Up

On the intellectual side, we find profound economic maladjustments in our own country directly tied up with internal problems of Europe; among them, the decreased market for our agricultural and factory surpluses. Now and then, in the course of the angry denunciations of democracy and other forms of political propaganda hurled at us from European capitals, some of the missiles imbed themselves in weak and sore spots in our national anatomy. We have rea-

son to be troubled. We have cause to reflect and an imperative and immediate duty to act.

One of the most hopeful reactions that the present European crisis has had on the American people is that, although there are some doubts as to the efficacy and practicability of our present form of democracy, the spectacle of German, Italian and Russian experiments has infused us with an almost fanatical desire to make our democracy work and to do it quickly. We are accordingly faced with the problem of altering and speeding our educational processes so that our masses can catch up with the new civilization, which is rapidly outpacing them.

Restating the Democratic Ideal

If we are on sound ground in stating that the preservation and reenforcement of our democracy should be the major objective of education, then we must build our entire system around this focal point. And this we can do without sacrificing either cultural or vocational training. I quote Charles E. Merriam: "Civic education has little significance when taken as if it were a thing apart from the rest of human life. This does not mean that civic feeling may not be examined by itself but only that it must always be related to the larger picture of which it is a part, even though from time to time a dominant part. It cannot long be forgotten that political loyalty depends upon the balance of social interests of which it is an index and without which it is nothing. The feeling of political loyalty must in the long run have a functional basis -- must serve

some useful social purpose in the life of those associated in the community."

As I see the problem, we must restate the democratic ideal in terms that will give to it at least some of the dynamic and dramatic force that has been evidenced by Fascism and other forms of absolutism. Although democracy does not easily lend itself to that type of dramatization, we must find methods consistent with the democratic ideal of freedom, by which this may be done, and once more revitalize it into a democratic and militant philosophy in place of a passive and defensive one. This will be primarily spiritual, since democracy relies on the concurrence of free men who agree to be freely bound; the force that accomplishes the binding is, therefore, the individual and spiritual acquiescence in a common course of action built up for the common good.

We need a positive ideal for individuals as against the negative ideal which involves subordinating the free soul. Our democracy should be a positive and militant force, a sword as well as a shield.

And thus I say, the first demand upon education in the present crisis is the restatement of our democratic ideal.

Standards for Public Officials

So far as I know, there is nowhere stated any standard for being, let us say, a good congressman, a good governor or a good judge. We have limited that to a few words in an oath of office without trying to give thought to its form, content or substance. Yet it would seem that a high school

youth might have some picture by which he could measure public officers and by which public officers could measure themselves, and a new generation might have some method of gauging how far public officers have lived up to this.

This is not as easy as it sounds since it involves drawing the fine line as to how far a democratic officer is supposed to represent public sentiment, which, degraded, means yielding to public pressure; and how far he is supposed to embody and enforce sound ideals, put negatively, to flout public opinion. But, of course, this type of education will feed upon itself and public sentiment will improve as we improve the standards of public office, and those conflicts will become the exception rather than the rule.

This preeminently is a problem of education, of that educational system which can be found in a democracy, where education is not involved in the conflicts of government but can definitely undertake the task of building individual character so that it will be able to make such distinctions.

And so I say the second demand upon education in the present crisis is to set up standards for public officers.

Attacking the Spoils System

Among the many enemies of democracy and one which so frequently leads to the degradation of public officers is the spoils system, that pernicious institution which puts political service on a bought-and-paid-for basis. The spoils system cannot be eliminated by attacking it from the top.

Only a generation educated to new values, a generation that has adequate substitutes for the acquisitive instinct will sustain a system that is not dependent on the motive of tangible reward. At present, our schools not only do not attack this problem from a positive angle but fail also realistically to approach it on the negative side.

Schools must approach this problem, with which can be linked lobbies,

pressure groups and corruption, with brutal candor. Vague generalities and platitudinous mouthings concerning the sacredness of our political institutions will not prepare a youth to meet the realities of government or make him a good citizen. The most thorough and searching study of the local government in the pupil's own community will save him from later disillusionment and will inculcate him with high civic standards at an age when his natural idealism should be fortified with a practical understanding of government as it is: for, in a searching analysis of local government, there will be found the noble, as well as the corrupt, and the many successes of popular government will stand out in emphatic and sharp relief against a sordid background.

Sins Against Free Government

Recently, before a grand jury in New York, important business men freely admitted to giving graft and bribes to racketeers and local politicians but refused to testify against any of them for fear of reprisals on their business or persons. Ineptitude and corruption had gone so far that these citizens felt they had more to lose than to gain by an attempt at remedial action. Youth has nothing to lose and all to gain by a frank study of these situations which exist in almost every community and in the nation at large.

Perhaps, no more useful exercise in civic government could be devised than to follow a tax or tariff bill from its inception to its enactment into The study would include the functions and techniques of log-rolling, lobbies and pressure groups, the genesis of some of the draftsmen of the bill, propaganda and the many other unofficial agents and agencies that help govern us. The study of the principal sins against free government is of major importance if we expect the next generation to throw all possible moral weight against those practices which are seen now to involve the greatest dangers to democ-

And, therefore, I say the third de-

mand upon education, having laid out some positive standards on the one hand, is to lay out certain definite negative exclusions. The area would not be complete, that is, there would be a tremendous area between in which individual judgment would have to be governed by strictly spiritual thought. Indeed that spiritual ideal is the positive force which prevents any standard from becoming sterile or which permits any individual to believe that merely by avoiding definite evils he is maintaining the march of free government.

Society has found new ways to impose its own ideas and practices as rules of conduct. I refer to the great development in the art of propaganda. With the advent of certain types of public relations council, news syndicates and the radio, a lie travels infinitely faster today than it did 100 years ago. Its effect is more immediate and therefore of greater harm to the contemporary generation. Much study has been given to the psychology of propaganda and its subtlety frequently makes it proof against detection. I would not have you think that I would suppress propaganda or that all propaganda is lying and harmful. It is the modern way of disseminating information and misinformation.

Learning Nature of Propaganda

There is, of course, a fundamental difference between education and propaganda. Education freely discloses the source, that is, permits the statement to be tested or discounted by the knowledge of its maker and its origin, so that a reader or listener may form his own conclusion as to how far it is biased by interest. Propaganda is used primarily to serve an end, does not disclose its source and recognizes no limits as to means. Our best, in fact our only defense against subversive propaganda is to build up a resistance from within, not to attempt the impossible - to scotch it at its source. Propaganda dies if it falls on barren soil and a generation that understands the functional value of its civic government,

that finds it serving a useful purpose in the everyday life of the community, will be immune to its dark purposes.

There are other types of propaganda that are not necessarily subversive. Advertising is perhaps the most common; and there are indirect ways of spreading ideas sponsored by special interests, not always wholesome, which do not use the direct method. A propagandist may indulge in a slurring of the truth and emphasis on facts or fancies which he believes favorable to him and a nonemphasis on the opposite side. All types of propaganda tend to close the minds of people and particularly youth to free discussion and education.

Today, in many schools and colleges, the synthesis of propaganda is being taught in courses on public relations and advertising, but, to the best of my knowledge, there are no courses in the analysis of propaganda. I think it important for the high school to include in its teaching such material as will enable a youth to detect the earmarks of propaganda in apparently innocent statements and common beliefs, so that he may assay them for their true worth.

So, I say, that the fourth demand upon education is the teaching of the nature of propaganda.

We must take into consideration in any approach to a more adequate education the new responsibility of the individual. Science and technology have both subordinated the individual to mechanical life and, at the same time, have vastly increased his power to disturb that life. The advances in those fields have left the education of the individual far behind. Today that device of detective fiction, the death ray, is a fact. The power once imputed to Thor to make thunderbolts is now an actual function of human agency. Every individual and particularly certain individuals suddenly become endowed with a power to do tremendous harm to other individuals, and, in many instances, to the group as a whole. Individuals are under a real duty to

handle their economic and mechanical processes so as not to be a danger to the group.

A legitimate subject of education is to teach the individual so to handle the economic and mechanical processes that he controls, be they big or little, as not to endanger the lives and happiness of others. At the bottom, it would be the moral duty of a garage mechanic not to allow an unsafe car to go on the road. At the top, it would be the duty of a banker, financier or utility magnate to handle his mechanical processes or his economic tools so as not to endanger or damage the safety of other groups.

Plainly, no precise technical line can be laid down. This is impossible, but the moral duty can be enforced on every individual to consider that phase and to take it into account. It would involve some general knowledge of the possibilities and dangers of the various mechanisms at work,

all the way from elementary matters for the general public, to the advanced studies of specialists. The ultimate line of defense must be the moral and spiritual approach of individuals. They must take such knowledge as they have or can master and consider the effects of what they do in relation to their neighbors and their community.

Thus I say, the fifth demand upon education is to teach the new responsibility of the individual to the community in the light of his new power to do irreparable harm. This leads me to wonder if the time has not now arrived when we can safely introduce into our public education some form of spiritual training. I wonder if education is safe if we exclude it. At no time in the history of man has he needed more than at present the power to make moral decisions and the willingness to include God in his worldly calculations.

Two Yearbooks in One

THE Thirty-Sixth Yearbook of the National Society for the Study of Education will comprise two independent volumes, it is announced. Part I, "The 1936 Yearbook on Reading," has been prepared by a committee of the society composed of William S. Gray, University of Chicago, chairman; Jean Betzner, Columbia University: Donald Durrell, Boston University: Arthur I. Gates, Columbia University; Bess Goodykoontz, Office of Education; Ernest Horn, State University of Iowa; B. Lamar Johnson, Stephens College; Rollo Lyman, University of Chicago; Paul McKee, Colorado State College of Education; Vera A. Paul, Whitworth College: Mable Snedaker, State University of Iowa; Willis L. Uhl, University of Washington; G. A. Yoakam, University of Pittsburgh.

This committee on reading has enlisted the aid of more than 100 persons expert on various aspects of reading. Their product will emend and carry forward the pronouncements of the important Twenty-Fourth Yearbook on reading and will indubitably be the most authentic and influential handbook on the teaching of reading that has been produced.

Part II, "International Understanding Through the Public School Curriculum," has been prepared under the general direction of a committee of the society composed of I. L. Kandel, Columbia University, chairman; W. C. Bagley, Columbia University; Esther C. Brunauer, American Association of University Women; Margaret Kiely, Bridgeport Normal School; D. A. Prescott, Rutgers University, and G. M. Whipple, National Society for the Study of Education. Prof. James T. Shotwell, Columbia University, has also been active in bringing this yearbook to completion, especially by enlisting the support of the Carnegie Corporation and of other organizations.

Something New in Scales

By J. THOMAS WADE

PROMINENT student of education has said, "Education is what you have left after you have forgotten all of the subjects you learned in school."

Many people have a way of looking at the school as a place to learn such subjects as reading, algebra and history. Those who have learned to look below the surface have observed that after leaving school people soon forget most of the subjects they studied but retain things that may be of greater value than the subject matter that was taught directly. When the average person is asked about his high school experiences he generally mentions a strong teacher who impressed him with the real values of life, the fun he had in extracurricular activities, the pleasure of reading in the library, or something that was not in the formal curriculum. It was this line of thinking that led me to attempt to get a measure of the secondary school as a part of the pupil's environment.*

The scale to measure the secondary school as a part of the pupil's environment was based on a long list of questions that attempted to cover everything that enters into the secondary school as we now have it. Six hundred thirty-two schools were surveyed with this list and the questions that seemed most significant were selected for the final scale. When the scale was completed it contained thirty-two questions. These questions were about the building and its equipment, the relation of the school to its patrons, provisions for health and physical development, provisions for ethical training, the school library,

extracurricular activities, guidance, provisions for charity, provisions for experimentation in teaching, the faculty, classification of pupils and the curriculum.

The method used in selecting these questions should have assured the choice of the most important among them. This is not positive proof but it indicates that such things as the school library and extracurricular activities are of importance and are perhaps just as important as the curriculum and the formal subjects.

The scale built in the subject seems consistent in that when the same schools are measured with it a second time by a different person the results of the two measurements are practically the same. It also seems to measure the thing that it attempts to measure. Since the original study was completed, the scale has been tried in several situations and it has been found that when schools were rated by other valid means and then

A rating scale that may be used to pick out the weaker high schools in any group has been devised. It attempts to measure the school as a part of the pupil's environment.

rated with the scale, the two ratings practically coincided. An individual school, either large or small, can be rated with the scale in about thirty minutes.

This is the only attempt that has been made to build a scale that will measure an entire school without a lengthy survey. If it will hold up in practice as it has in experimentation and give results that are comparable to those obtained in surveys, it will save much time and money to those who use it. It is merely a scale with which an investigator may find the level of a school. It does not attempt to give a diagnosis of the school or to suggest items that should be added to a school to improve it.

The scale may be used to pick out the weaker schools from a group. If it is desired to improve these schools after the scale has been used to pick them out, it will be necessary to make a more extensive study of them as a basis for the improvement. Even though this is true, the scale should save much time in giving comparable ratings of schools so that the weaker ones may be selected for improvement.

A number of interesting things came out as a by-product of building the scale. The data indicate that the schools increase in efficiency until an enrollment of about 700 is reached and that any further increase in enrollment is accompanied by little increase in efficiency. If this is true many schools in our cities are much larger than they should be. Even though a number of studies have indicated clearly that our secondary schools should have sites containing from twenty to thirty acres, most secondary schools are built on small sites. About one-half of our secondary schools enroll fewer than 100 pupils and, as measured by the scale, are far below the efficiency we should demand of our secondary

The study has attempted to point to the fact that the entire school situation contributes to the growth and education of the pupils attending it and the scale built in the study attempts to measure this situation. The most important result that can come from the study is a realization that formal teaching is only a part of the complicated situation and that many things besides formal learning should come out of attending a good secondary school.

^{*}Wade, Thomas J.: "A Measurement of the Secondary School as a Part of the Pupil's Environment," Teachers College, Columbia University, Contributions to Education, No. 647. New York: Bureau of Publications, Teachers College, Columbia University, 1935. Pp. vi + 68, \$1.50.

Teaching by Correspondence

By M. M. CHAMBERS

NSTRUCTION by mail is now carried on by two types of agencies: (1) the extension divisions of state or other publicly owned institutions of higher education (the state of Massachusetts offers an outstanding example of a department of university extension that is a bureau of the state department of education, and not a part of any university or college); and (2) educational institutions under private control. The latter class includes both nonprofit educational corporations and proprietary institutions operated for profit.

There are about 275 proprietary correspondence schools in the United States. Only about fifty of these are members of the National Home Study Council, which is a trade association and accrediting agency for such institutions.

Proprietary Schools

The conduct of correspondence instruction by proprietary institutions is subject to a degree of control by the federal government through the postal regulations, and is also within the jurisdiction of the Federal Trade Commission. In 1927 the leading private correspondence schools participated in a trade practice conference which produced a code of rules under the supervision of the Federal Trade Commission. With the coming of the Blue Eagle in 1933 these rules were revised and made a code of fair competition under the NRA. With the passing of the Blue Eagle, the Federal Trade Commission resumed cognizance of the correspondence study field and, on Aug. 5, 1936, tentatively approved a new set of trade practice rulings that had been drawn up at a conference of private correspondence schools in Chicago.

This code consists of thirty specific rules, all of which are designed to minimize the use of deception and misrepresentation in advertising, in the use of names or symbols and in the issuance of credentials.

From time to time the states are enacting statutes designed to forestall the victimization of gullible citizens by unscrupulous profit-making enterprises calling themselves correspondence schools. New statutes on this subject have been made law in New York, Illinois and Massachusetts within the past year. The story of these laws and their administration, to be written later, will interest educators.

In recent years there has developed a movement toward the use of what is called supervised correspondence study in public high schools or in public elementary schools as a substitute for high school attendance. In the rural parts of many states a considerable proportion of the population of high school age does not have easy access to adequate high school facilities.

"Supervised" Instruction

Especially is this true in some of the sparsely settled states of the trans-Mississippi region, where in some instances it appears to be impossible to maintain an adequate public high school within commuting distance of the homes of many young persons who are entitled to high school opportunities. As is well known, hundreds of rural high schools are so small as to be unable to offer a sufficiently varied curriculum or a sufficiently large teaching staff to constitute an adequate modern secondary school. In areas in which there is sufficient density of population, the generally approved remedy is consolidation of schools. But when the population is so sparse as to make even the largest practicable school district incapable of maintaining a respectable high school, it is argued that some other remedy must be devised.

The extension division of the University of Nebraska, with the aid of certain philanthropic grants, has developed a correspondence instruction center which prepares courses especially for the benefit of pupils in small high schools and of graduates of rural elementary schools who are not within reach of any high school. These courses can be taken only under the supervision of a teacher in the public school that the pupil attends, and hence is derived the name "supervised correspondence study."

The marking of the pupil's work and the determination of his success in the course are in the hands of the correspondence center, and the successful completion of approved courses may carry appropriate high school credits, if the authorities of the local high school that the pupil attends agree to accept such credits.

The principal argument in favor of this arrangement is that it affords the competent and ambitious pupil his only chance to obtain instruction in secondary school subjects suited to his tastes and needs, which his local high school is unable to offer on account of the limitations of its curriculum. More ardent proponents of the plan also assert that it offers a means of individualized instruction that may be of value even in larger high schools.

New Law in North Dakota

Apparently not many states have any statutory or administrative regulations on the subject, but in a few states certain official pronouncements of considerable interest have been made.*

In 1935, North Dakota enacted a statute "to require free correspondence courses to be provided for all North Dakota children of high school age." This act provides that a complete high school curriculum by correspondence shall be set up by one state institution of higher learning to be designated by the state board of administration (the State Agricultural College at Fargo has been so designated).

Must Attend School

All pupils taking advantage of the provisions of the act must continue to attend their local district schools and study their correspondence lessons under the supervision of the local teacher, receiving free desk space and being under the same disciplinary supervision as other pupils. This applies to graduates of elementary schools who do not have access to high schools, as well as to pupils in attendance at small high schools. Furthermore, pupils who are physically unable to attend any school may take correspondence courses under the supervision of a parent or guardian. Pupils must pay for their own books and materials, and a fee of \$1 per subject to the supervisor, as well as the postage on materials mailed.

The whole plan is under the direction of an officer entitled the state director of correspondence courses in secondary education, appointed by the state board of administration and having his office at the State Agricultural College. Administrative costs are to be paid out of the state equalization fund provided for by an act of 1933.

The New Hampshire State Board of Education, in a document issued in 1935, recommends that the smaller high schools in that state may well give consideration to the feasibility of allowing credit for not to exceed four of the customary sixteen units, for the completion of courses by corre-

spondence under certain prescribed conditions.

Eight conditions are specified: (1) the courses must be those prepared by a state division of university extension, "or standard postsecondary institutions," but in case desired courses are not available, "other approved sources of supply may be relied upon"; (2) the cost of tuition and supplies must be paid by the local school district; (3) the plan must be officially made an integral part of the local program of studies; (4) correspondence courses must be only in such subjects as the local teachers are not qualified to teach, or in which a class "cannot be economically organized because of the small number of pupils desiring the work"; (5) not more than one credit course by correspondence during any year is permissible for any pupil, and it is recommended that each correspondence pupil take at least three regular courses in the high school each year; (6) each correspondence pupil must spend at least two fortyminute periods daily on the work, and at least one of these periods must be during the regular school day and in a room in which a supervising teacher is present; (7) all schools permitting correspondence courses for credit must have all materials ready at least ten days before the opening day in the fall, and (8) courses must be completed with a supervised examination administered by the headmaster or a teacher of the local school.

Rules in Minnesota

The Minnesota State Department of Education issued in August, 1935, a document containing a few pages descriptive of the possibility of the use of supervised correspondence instruction in high schools, and some well formulated advice and cautions regarding the introduction of this work. After a somewhat laudatory introduction, this document warns that the plan is not to be taken as a panacea for all secondary educational ills, and proceeds to lay down the following advice.

(1) In no case should any correspondence course be substituted for any subject regularly scheduled in the curriculum; (2) correspondence work should not be open to pupils below the eleventh school year, nor to any pupil not regularly enrolled and in attendance at an accredited secondary school; (3) the school district, and not the pupil, should pay all costs; (4) not more than one credit in correspondence study should be allowed toward graduation; (5) a period of at least sixty minutes daily should be spent by each correspondence pupil under the personal direction of a supervising teacher at a regularly appointed time and place; (6) no courses should be purchased from any institution not approved by the state department of education.

"In this connection, the policy of the department will be to approve only public institutions, state and endowed, which have facilities for offering the work and which are offering recognized courses to meet secondary school needs." The quoted sentence apparently excludes the use of courses sold by proprietary correspondence schools.

South Dakota Joins Nebraska

In South Dakota the superintendent of public instruction issued in 1935 a statement concerning supervised correspondence study as a part of his bulletin on programs of studies for small high schools. Since neither the state department of public instruction nor any state institution in South Dakota can afford facilities necessary for the development of instructional materials and the conduct of a correspondence center, arrangements have been made whereby high schools in that state may obtain these services from the correspondence center in the division of extension at the University of Nebraska. The entire cost is \$14 per course per pupil for a full academic year.

South Dakota recognizes nineteen separate courses as acceptable for high school credit. These are distributed in the following fields: art and

(Continued on page 24)

^{*}For easy access to the sources of the information which follows I am indebted to Walter H. Gaumnitz, Senior Specialist in Rural Education, U. S. Office of Education, Washington, D. C.

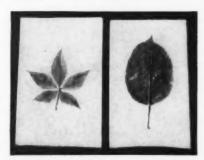
Tips for Natural Science Teachers

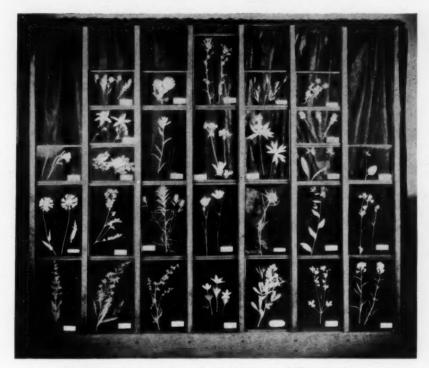
By PAUL H. SHADDLE

ISUAL aids can be of incestimable value in teaching natural science courses, for through these aids the learning process is stimulated and accelerated. A number of helpful devices may be made easily without a great deal of cost. Specimens of flowers, leaves and cones may be displayed in the classroom during the winter months when field trips and direct observation are impossible.

One especially helpful device is a set of flower plates. These plates may be made from flowers gathered during the summer months and pressed between pieces of felt fabric weighted with heavy rocks. The flowers should be left in the press for about ten days in order to let them become thoroughly dry, as they should be quite dry when mounted. Several blossoms and a few leaves of each species may be mounted in separate planes along with a sticker bearing the common name as well as the family, genus and species.

For the larger flowers one should use glass plates 8 by 12 inches, and for the smaller ones, plates 6 by 8 inches. These plates, after the





Display rack for a set of pupil-prepared flower plates.

flowers are properly placed, should be bound tightly on all sides with picture binding.

In order that pupils may have access to the plates at any time one may also build a rack in which the plates can be readily displayed. For this purpose it is best to have the plates of not more than two sizes with one dimension of each plate the same. Thus the smaller ones can be mounted horizontally and the larger ones vertically.

Since flower colors are likely to fade, heavy black curtains hung over the rack will keep out the sunlight and prevent a great deal of fading. If proper precautions are taken the flowers will keep their colors during the school year, and without a great deal of labor the plates can be remounted with fresh flowers when the following summer arrives.

Identification of leaves and the study of their types of veination, margins and shapes may be aided greatly by using plaster-of-Paris plaques. These can be made by pupils in the fall before the leaves have

disintegrated. The impression of the leaf should be taken on modeling clay, which has been rolled out smooth. After pressing the leaf firmly into the clay with the under side down, one should carefully pull the leaf free from the clay. From this clay print a number of permanent plaques may be made.

A cigar box with the bottom and top knocked out makes a good form for the plaster-of-Paris. After placing this form firmly on the clay and pouring the plaster into the mold, one should allow it to set, usually thirty minutes, until the plaster has hardened. The form may be carefully pried loose from the clay, as they separate readily, and the leaf will then be found in perfect relief on the plaque. After the plaster has thoroughly dried the appearance may be improved by sandpapering it with a fine grade of sandpaper.

Painting the relief a foliage green gives the appearance of the actual leaf upon the plaque, and even the finest veins will be distinguishable.

The use of lantern slides in classes

of botany, biology, general science and geology has many highly commendable features. Slides made from pictures taken by the instructor or members of the class increase the interest because of the personal association. A valuable pamphlet on making slides may be secured from the Eastman Kodak Company. The process of tinting the slides with water colors is not a difficult one, and complete instructions for tinting

are given in the pamphlet. It is surprising how quickly a pupil will learn to identify plants and trees by using, along with a plate or plaque, a tinted slide of a tree or flower growing in its natural environment.

These simple visual aids have done a great deal to vitalize the subject matter in my natural science courses, and I have found that they are a stimulus to many pupils in their vocational and avocational activities.

Teaching by Correspondence, Cont.

(Continued from page 22)

drawing; commercial subjects; journalism; mathematics; science, and the social studies. None of these courses is a duplicate or a substitute for any of the courses in the core curriculum now required for graduation in South Dakota high schools. The specifications regarding purchase of the materials by the school district and the assignment of a definite daily period for supervised study with a teacher present are similar to those in Minnesota, just discussed.

The South Dakota bulletin enumerates six purposes that may justify the introduction of supervised correspondence study in a given school: (1) to decrease educational cost, when such an arrangement would save the salary of one or more teachers; (2) to provide vocational subject offerings for small high schools; (3) to provide courses for irregular pupils; (4) to decrease the teaching load of any teacher who might be overloaded; (5) to provide for special subjects for the gifted children, and (6) to make available subjects that the local teachers are not qualified to teach. It would seem that Nos. 1 and 4 of the foregoing category are questionable, if their tendency is to increase the pupil-teacher ratio, and thus encourage the use of absentee instructors instead of building up an adequate resident teaching staff. Probably all will agree that No. 5 is less open to attack than any, because the problem of providing suitable outlets for the creative activity of gifted children is one of great importance, and this class of children is probably most likely to pursue worthy correspondence study with a high degree of persistence and success.

The possible merits of this innovation have already been recognized and carefully considered in several states. It is desirable that the experience of these states, as crystallized in their laws and administrative orders should be made known to the other states. If a significant means of enriching the secondary school curriculum has been discovered and put to use in certain states, provision should gradually be made for its extension to other areas in which its merits would justify its use. On the other hand, if its disadvantages outweigh its merits, or if it is subject to abuses that threaten the integrity of secondary education in public high schools, then let educators be on the alert to advocate the adoption of measures that will either purge it of these abuses or exclude it from the schools alto-

The following regulatory trends seem to be developing: (1) state departments of education are taking cognizance of the supervised correspondence study plan and issuing advisory or mandatory rules concerning it; (2) these authorities tend to recommend (a) no dealings with any correspondence center not approved

by the state department, (b) exclusion of dealings with private correspondence schools, and (c) making of all contracts and payment of all costs by the local school district and not by the pupil.

These regulatory trends seem to be, on the whole, salutary. Certainly there are legal as well as ethical questions as to whether a school district can lawfully use public money for the purchase of absentee teaching services from proprietary organizations; but if certain desired instructional materials of high quality are available only from this source, it may be questioned whether the use of such materials should be denied to pupils in public schools. Certainly the logical public administrative authority to regulate any new statewide educational project in the schools is the state department of education.

Common Sense or Heresy?

It is time for English teachers to get together and scrap some rules, in the opinion of Prof. Charles C. Fries, editor of the Early Modern English Dictionary.

They might well throw overboard the rules forbidding "none" with a plural verb; "either," "neither," "each" and "everyone" with a plural verb when other words in the sentence give a clear plural meaning; or the use of "everybody," "everyone" and "nobody," indefinite pronouns of common gender, singular, but carrying plural implications, with a plural reference pronoun separated from the indefinite by a word or words.

The "can-may" and "shall-will" rules might well be ignored also, especially the use of "can" in questions of permission and "will" with the first person in statements of fact, or with the second person in questions. Likewise "like" should be liberated for use in such statements as "he took to figures like a duck to water."

It should be agreed that the past tense of "ring" could be either "rang" or "rung"; of "sing," either "sang" or "sung"; of "sink," either "sank" or "sunk."

School Finance, 1930

By WILLIAM G. CARR

RECENT writers on school finance have asserted that financial difficulties now facing the public schools are not due solely to the economic depression. If this is the case, it is important and practical to ask specifically what conditions and trends existing before 1930 were responsible for at least part of the fiscal troubles now experienced by public education.

A great deal of the history of school finance necessarily dates from 1870. For some who survey the school finance statistics of the sixty years between 1870 and 1930 the first reaction may be one of wonder or even of indignation at the enormous growth of educational expenditures. These educational expenditures must be considered against the background of certain other important social and economic data.

The population of the United States between 1870 and 1930 increased from about 39,000,000 to about 123,000,000. This is an increase of more than three-fold during the sixty-year period. It represents an average increase in population of 1.4 millions per year. During the same period the number of children of school age, that is, between the ages of 5 and 17 inclusive, rose from 12,000,000 to 32,000,000. This is an increase of slightly more than two and a half times. There were, therefore, in 1930 relatively fewer children to be educated and relatively more adults to finance that education than there were in 1870.

The number of children of school age should also be compared with the number of children actually enrolled in the public schools. While the total number of children of school age increased slightly more than two and a half times during the sixty-year period, the number of these children in the public schools rose from 7,000,000 to 26,000,000, an increase of nearly four times.

In 1870 there were less than 100,-000 children enrolled in the public high schools. By 1930 that enrollment had increased to approximately 4,500,000. Distributed evenly over the entire period, this growth may be visualized as the entrance of eight new public high school pupils each time the clock struck the hour, day and night, week days, Sundays and holidays, for sixty years. While the total school enrollment increased less than four-fold, high school enrollments, considered separately, increased during this same period by geometric progression, standing in 1930 at forty-four times the enrollment of 1870.

The number of children enrolled in high school doubled in the decade from 1880 to 1890, more than doubled between 1890 and 1900, very nearly doubled once more between 1900 and 1910, increased substantially more than double from 1910 to 1920 and redoubled yet again by 1930. In 1870 the elementary enrollment was eighty-two times the high school enrollment; in 1930 it was only five times that of high schools. This trend was one of the great social movements in our history.

The first requirement of the influx of new pupils was some sort of housing for them. The rapid growth of enrollments combined with the neglect during the World War of school buildings and of construction created a demand for new school buildings which could not, in many communities, be met out of current revenue. Districts were forced, therefore, to

(1) Dependent upon the local property tax, (2) administered by an outworn plan of local school districts, (3) burdened with debt, and (4) expected to maintain equality of educational opportunity and prevented at every turn from doing so—no wonder American school finance in 1930 was in no condition to withstand fiscal stress and strain.

borrow money by issuing bonds. School i n d e b t e d n e s s more than doubled between 1920 and 1930, piling up a burden of future obligations which, however necessary, was nevertheless to constitute a serious liability in the days of financial difficulty to follow.

In 1870 a little under \$63,000,000 was spent on public education; in 1884 we had our first hundred million dollar program; in 1913 the half billion mark was attained; in 1920 the first billion, and in 1930 came the peak of just under two and a third billions. An examination of this trend reveals that school expenditures have also tended to go up by geometric progression. The curves for total expenditures and for high school enrollments up to 1930 almost coincide and both curves depart markedly from those for total enrollments and for population in general.

Do we not have in these two parallel curves a clue to one of the major causes of increased school costs? It is true, of course, that other factors have been involved. The value of

the dollar declined more than 50 per cent. Certain improvements in educational opportunities were no doubt responsible for a proportion of the increase in cost. However, the great upward surge of enrollments, especially at the high school level, seems to be the principal factor which pulled school costs up with it. The major factor in increase of school costs before 1930 was the number of children enrolled in the public schools. Since the high school was the point at which the principal increase occurred, the trend in school costs followed that of high school enrollments. In short, the schools in 1930 were doing a large and constantly increasing business because the demand for their services and products had been growing by leaps and bounds for more than half a century.

Property Tax Main Support

The funds that the public schools required to take care of these accumulating responsibilities were derived in 1930 from sources which, on the whole, differed little from those used twenty, thirty or forty years earlier.

The great mainstay of the financial structure of the public schools was the locally assessed, levied and collected property tax. In 1930 it was providing nearly 80 per cent of all of the school revenues, and the proportion of school revenues derived from this source had been slowly increasing for at least forty years. When the depression struck the American school system then it was an enterprise financed primarily by property taxes, and primarily by property taxes levied by the local school district.

State taxes and appropriations for schools increased in absolute amount from about \$26,000,000 in 1890 to more than \$300,000,000 in 1930. Yet so rapid had been the growth of the total cost of the schools that the state in 1930 was contributing a considerably smaller percentage of the total cost than it had been in 1890. However, even as early as 1930, there was a slight tendency for the propor-

tionate share of school costs carried by the state to mount upwards.

In the early years of the republic high hopes had been maintained that the generous endowments in the form of land grants from the federal government would provide significant assistance to the several states in the support of their public schools and even obviate the need for school taxes of any kind. Long before 1930, however, it had become quite clear that these anticipations were not to be realized. The income from the lands was frequently mismanaged or stolen, but even if it had experienced better management this endowment could not have coped with the unexpected flood of increased enrollments in the public schools. The gross yield from these permanent funds rose from about \$8,000,000 in 1890 to more than three times this amount in 1930, but the proportion which this constituted of all school revenues steadily dwindled. At the beginning of the depression not much more than 1 per cent of the total cost of American public schools was being provided from the income of permanent funds.

The federal government, of course, was participating in the support of certain phases of the public school program. The grants for vocational education and other purposes, however, although they loom large when considered by themselves, made only a negligible contribution to the total cost of the school program. Repeated efforts to develop a federal policy of general aid to education had met with no success.

A Little Pioneering Done

Although the cost of education thus continued to rest upon the local property owner, many of the states in the two decades prior to the depression had been experimenting with some success in shifting the cost of the state government from the state property tax to other types of taxation, such as those on business and personal incomes. Three states, by 1930, had so arranged their financial matters that they derived all of their state revenues from sources other

than property tax, and five other states used the property tax for less than 10 per cent of their total revenues. Nor was this movement limited to a few pioneering states. In 1915 thirty-five of the states derived one-half or more of their revenues from the general property tax. In 1930 only one state did so.

Nevertheless, while this general modernization of state revenue systems was going forward, it had not affected school support significantly by the time the depression began to be felt. The bulk of the growing burden of the support of education rested without significant change exactly where it had rested a generation earlier — upon the back (or upon the pocketbook) of the owner of local real estate and the improvements on it.

"Covered Wagon" Control

These facts lead us to inquire as to the nature of the political unit which was set up for administering this local property tax and running this expanding school system. In 1930 each of the states of the Union, with the single exception of Delaware, had allotted to some form of local school district not only a large measure of control over educational policies but also the burden of the financing of education. The relationships among these units presented a bewildering array of types, trends and variations. The one-room school and the onehorse school district had been characteristics of the educational system of the frontier. Although the conditions of frontier life had largely disappeared, and although modern methods of communication and transportation were swiftly weaving the entire nation into a series of larger and more compact units, the local governmental agencies designated for the support and control of education continued, in most states, almost unchanged from the days of the covered

The picture is further complicated by the existence of a series of intermediate units of varying importance and authority standing midway between the small local districts and the responsible state government. These intermediate units, generally termed counties, were, as a rule, loosely organized and politically administered. The net result was that, with the exception of a few states such as Maryland and Utah, these intermediate units exercised little significant leadership and constituted no real check upon the excessive multiplication of small schools and school districts.

There were in existence in the United States approximately 127,000 school districts, each a semi-independent administrative and financial unit. Most of these units were very small. The average unit employed only seven teachers and covered an area less than five miles square. In twenty-six of the states in which the district administrative system flourished unabated were to be found about 120,000 out of the 127,000 school districts in the entire country. Most of these small school districts employed only one teacher, so that three out of every five school buildings in use in the United States were of the one-room type.

More Trustees Than Teachers

In most of these small units the management of the financial affairs of the schools was entrusted to a board of three local trustees. This board, with practically no professional advice and with a minimum of supervision and control by state and county authorities, was the master of the educational and fiscal destinies of the district. There was one school board member for every two teachers in the United States. In Arkansas, Idaho, Kansas, Michigan, Minnesota, Mississippi and seven other states there were more school board trustees than there were teachers. Arkansas had 19,000 school board members and 12,500 teachers. Nebraska had 23,000 school board members and only 15,000 teachers.

The handful of states which had organized their school districts into units of appropriate size for efficient administration made the district unit states appear even more unwieldy

than would otherwise have been the case. Utah, with 85,000 square miles of territory, had only forty school districts. Its neighboring state, Wyoming, with but little more area had ten times as many school districts. Louisiana operated a good state school system with 66 parish school districts, while Oklahoma, less than 50 per cent larger in area, had seventy-five times as many districts. Maryland, operating under a county unit system, had only 24 school districts, while Connecticut, with approximately one-half of Maryland's area, had seven times as many school districts.

Some of these differences could be justified, at least in part, by geographic or other conditions. On the whole, however, the machinery set-up for administering the local school district was weak and inefficient. It encouraged small schools with heavy overhead expenses and meager educational opportunities. The fact that the county school superintendency was almost everywhere regarded as a temporary job rather than as a professional career added to the difficulty of the situation and perplexed those who sought a remedy. It is not difficult to imagine the effect of economic depression on such a structure.

It may be paradoxical, but I think it may be said accurately, that in 1930, and in the years immediately preceding, the two characteristic features of American education were a democratic philosophy which was based on the ideal of an equal educational opportunity for all children, and an educational practice which almost everywhere denied and distorted this ideal.

Vast Differences in Opportunity

Vast differences in educational opportunities existed between states and even greater differences existed between individual districts within the same state. Opportunities in the North were better on the whole than those in the South. The opportunities of children in cities were better on the whole than those of children in rural districts. It may be that the evidence cited will leave the impression that all phases and areas of American education were, prior to the depression, in a most unsatisfactory condition. If so, that impression should be corrected at once.

The majority of educational leaders were keenly aware of the differences that have been catalogued. They had been calling these differences to the attention of the public for many years, but in the basements of state capitols the dust had settled thick on reports of educational commissions recommending the establishment of county units of administration or other plans for abolishing the small local school districts.

For a generation students of taxation had been preaching the necessity for supplementing the property tax by other sources of public revenue. Their advice had been duly noted and filed but little had been done to put into practice the progressive reforms which they recommended.

III Prepared for Crash

In almost every state in the Union studies had been made to show the differences in educational opportunity within the state. These figures also were regarded in most states as matters of academic interest and secondary importance. Public opinion was not aroused and the minority who stood to profit by the perpetuation of the existing unsatisfactory conditions were able in many cases to checkmate the plans for improvement advanced by leading students of finance.

In short, the schools, like many other American institutions in 1930, were ill prepared for the economic difficulties which waited just around the corner. The great influx of new pupils, brought to the public schools by social and economic developments, was entirely outside the control of school people themselves. Faced with this constantly augmented army of new pupils, the schools were forced to expand their facilities and to borrow heavily for the construction of new physical equipment to take care of the enrollment.



Our Town Entertains

By G. W. BANNERMAN

USIC in the Wisconsin public and parochial schools has seen a steady growth during the last sixteen years. The state music festival has developed from an event participated in by ten schools to one of more than 150 schools. During the months of April and May, more than 10,000 junior and senior high school pupils take part in twelve district festivals preliminary to the state festival.

This article is an account of how Wausau, a city of 24,000 population, prepared to entertain this mammoth music festival. It had to house and feed 5,000 musicians for two days or more and to provide for many more who would come for one day only.

A general chairman, twenty-four committee chairmen and 250 committeemen were appointed, representing every civic and fraternal organization in the city. Chairmen were selected for their influence and civic interest. This group constituted the executive board of the festival and was held responsible by the general chairman for all activities.

Each committee was assigned its responsibilities by means of detailed printed instructions. So eager were the citizens to mobilize in behalf of the festival that no one refused to serve on committees. All work was handled by one of the following committees: finance, press and publicity, commissary, ticket sales, halls, park-

The mayor of Wausau, Wis., has appointed himself official greeter and umbrella holder to visiting girl musicians. This town of 24,000 recently housed some 5,000 high school bandsmen and \$1,000,000 worth of instruments during a state music festival.

ing, parade, railroad rates and traffic, award night, city and county officials, information, custodian, exhibits, decorations, concessions, program, registration, receptions, entertainment, transportation, first aid, guide, and stenography.

At the first meeting of the executive committee city and county officials pledged their support to the festival. E. C. Hirsch, superintendent of schools, guaranteed the help of the board of education and the public schools. Every parochial school and every civic club proffered their enthusiastic support.

During the months of January, February and March many committees held meetings. The commissary committee established a menu and contracted with the various churches and restaurants. Twenty such establishments or groups served a total of 15,000 meals on a contract basis. Thousands of meals were served to those musical organizations that decided to free lance for food. All eating places were carefully inspected for cleanliness.

Approximately 100 women canvassed the city for rooms, for housing was the biggest task the executive committee had to face. The committee secured 2,000 rooms, and on Friday evening of the festival, 5,000 persons were comfortably housed. Farmers who lived in the surrounding community opened their homes to visiting pupils, providing the necessary transportation. Schofield and Rothschild, two small neighboring communities, housed several hundred musicians. Many Wausau residents Just see how many youngsters have climbed on the Eau Claire band wagon! Look, too, at the 44-inch and the 76-inch drum majors. Below, Wausau's own 100-piece high school band is drawn up in parade formation.

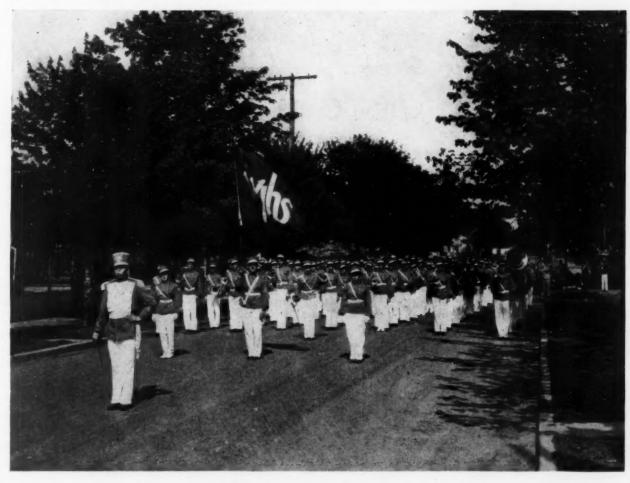




entertained five or more pupils, while a few citizens housed up to seventeen musicians. A few fathers asserted that they slept in the bath tub in order to extend this hospitality.

Several weeks prior to the opening of the festival special headquarters were established on the second floor of our local hotel. There the special stenographers, with the aid of the registration committee, started to assign the 5,000 prospective guests to rooms, band headquarters and eating places. This tremendous task caused the members of the committee to work day and night. Twenty stenographers typed duplicate housing cards for each visitor.

As each musical organization arrived, its director would check with



headquarters where he received a large envelope containing meal tickets, housing cards, official programs, special instructions, his own headquarters location and such other data as the committee felt necessary to include in the general instructions. All organizations were housed as groups in certain sections of the city. This enabled the director or chaperons in charge to check on all pupils.

The publicity committee soon had the entire city aroused and all committeemen were working at top speed. Citizens were calling headquarters offering their help and additional housing facilities. A few weeks prior to the festival, headquarters at the Hotel Wausau was busy on practically a twenty-four-hour basis.

On Thursday evening the young musicians with their directors and chaperons started to arrive. Ten special trains bringing a total of 2,500 pupils reached Wausau by Friday noon. Special busses and private cars brought an additional twenty-five hundred to the city. The problem of transportation was worked out in detail, and as rapidly as trains arrived 300 courtesy cars and trucks transported the pupils, with their equipment, to their special headquarters rooms, where the director distributed all housing cards, meal tickets and gave out special instructions.

Several hundred Boy Scouts escorted pupils to the various homes, each pupil having been supplied with a map of the city through the courtesy of a local insurance company. Any pupil visitor could call a courtesy car at any time of the day or night.

The traffic committee secured the services of 100 national guardsmen who patrolled the streets and directed traffic. Everything to assure complete safety was worked out, and two cars equipped for Red Cross service with physicians and nurses in charge were ready at all times. During the festival not a single accident occurred. First aid stations were conveniently located.

A first aid station for musical instruments rapidly repaired all broken instruments. It was estimated that

headquarters where he received a large envelope containing meal tickets, housing cards, official programs, special instructions, his own headquarters location and such other data as the value of instruments in Wausau during the festival exceeded \$1,000,-000. Many of the leading music houses had splendid exhibits of old and rare instruments.

During the festival thirteen concert halls were used from 8 a.m. until 9 p.m. Each contest manager was held responsible for the successful management of all events assigned to his auditorium. All bands, orchestras and choruses competed on a classified basis and on that basis appeared at the various concert halls. Seventyfour bands, twenty-four orchestras and fifty-four vocal groups, or a total of 152 organizations, took active part in the festival. There were 245 brass, 190 woodwind, 105 string, 47 vocal and four percussion solos. All judges were from out of the state, most of them the eminent musicians of the Middle West. Dictaphones were available to the judges and the necessary stenographic help was provided, enabling the judges to read what they had dictated shortly after any given group had completed its concert.

The entertainment committee provided wholesome recreation for all groups. Dances, moving pictures,

sight-seeing tours, tennis, swimming and golf were made available.

The Wisconsin school music festival has succeeded in carrying out its original purpose as stated in the constitution:

- 1. To stimulate interest in the study of school music and to develop a desire for good music in the schools.
- 2. To encourage good fellowship and sportsmanship between member schools of the association.
- 3. To cultivate a worthwhile leisure-time interest for boys and girls.
- 4. To bring before the state department of education, the state university and the citizens of the state in general the work of the association, in order that it shall gain greater recognition and support.
- 5. To secure recognition of school administrators and boards of education to the effect that music is an integral and vital part of the school curriculum and is entitled to recognition as a curricular subject.
- 6. To develop a unit in each community which shall serve as a vital force in bringing the people into closer relationship with the schools of the state.

Cutting Costs in Instrumental Music

By LEE M. LOCKHART

THE public school instrumental music department tries to bring into the experience of pupils emotions and techniques incident to both production and appreciation of instrumental music. Its job is to teach the child to manipulate an instrument, read symbols of notation and appreciate progressively good results in himself and others.

To give this training economically to the large number of pupils who are now demanding it is no small problem. The situation requires that each school provide a reasonably adequate department for this branch of music training. This entails the hiring of teachers trained to teach instrumental music by the class method and the purchase of a basic set of instruments. Per pupil costs comparable to those of subjects other than music are made possible by using the instruments in the same manner that typewriters and manual training equipment are now used. Each pupil playing a wind instrument should have a mouthpiece of which he has the exclusive use.

The multiple use of instruments and the large class method of teaching should help to procure appropriations, for where can the same number of pupils be cared for at less expense than in the music room where classes of forty or more could be the rule?

Knowing the Neighborhood

Helps Principals Plan Pupil Activities

as his features and their location. Maps of were made. At the conferences held every two weeks the principals repeal ported progress. In these conferences the questions and suggestions presies sented helped each principal to go forward in his own study and to see

The physical features of each district were so numerous that it became necessary to classify them in order to work with them effectively. The principals decided upon the following classification:

his own district more clearly in rela-

tion to the other districts of the city.

1. Homes, including yards and play spaces.

2. Physical features built primarily for pleasure such as theaters, pool halls and parks.

3. Physical features built primarily to assist in education and character training such as schools, churches, museums, art galleries and libraries

 Physical features in which articles for sale are made or grown, such as factories, bakeries, dairies and greenhouses.

5. Physical features built primarily to assist in the distribution of articles such as stores and markets.

6. Physical features existing primarily for personal service such as barber shops, beauty shops, dry cleaning establishments, laundries and restaurants.

7. Physical features used primarily in the carrying of people or articles such as interurban stations, bus stations, railroad yards and tracks and drayage offices.

8. Physical features built to serve all of the people in the community and supported by taxation such as fire stations, police offices, courthouse,

postoffice and postal substations.

By GEORGIA DAVIS

It was found that while certain districts resemble each other in certain items, each district has a physical setup quite different from any other district. The following brief quotations from some of the principals' reports show how the districts differ one from the other.

How Districts Differ

"There are numerous manufacturing establishments scattered throughout the entire district. Chief among them are Acme Pattern Works and Advance Company."

"Industrial establishments are very few and small."

"Scattered throughout the district are many vacant lots, which are used for free play."

"There are no vacant lots in the entire district."

"Seventy per cent of the children live in houses built for one family, but a large number of these houses are occupied by more than one family, each family being crowded into a space too small to permit proper privacy and cleanliness. Most of the houses are frame and are badly in need of paint and repair. A number of the houses in which the children live are mere hovels."

"Thirty per cent of the children live in modern, well furnished homes surrounded by well kept yards, which have flowers and pools. About 50 per cent live in single houses comfortably furnished and well kept with small yards in front and room in the rear for a vegetable garden and a play space for the children. A few families, numbering eight to ten members,

THE schools are always facing the problem of how to make pupil activities link as closely as possible with the community. This is sometimes difficult to do. It is often hard to discontinue those teachings that are of no longer any real value. The school is continually being forced to take on new duties notwithstanding the already overcrowded curriculum. The organization of any school on the basis of its own community is a task that should challenge the thought of any educational group.

With this in mind the elementary school principals of Richmond, Ind., took for the topic of group discussion for the year the general subject of "Organizing the School on the Basis of Its Own Community." It was first assumed that the school must deal with the pupil as he is. It was assumed that there exist in the community places and things that constitute vital influences in the pupils' lives. It was assumed that those in charge of the school should look for these vital influences, should distinguish between the good and the harmful, and in its program should attempt to increase the good and decrease or eliminate the harmful.

Combing Their Districts

It was, of course, impossible to carry out such a program in one school year. The group decided to begin the study by (1) making a careful examination of each district to determine the physical features found in the district, and (2) obtaining as accurately as possible the attitudes toward these physical features held by the children in the district.

It was necessary for the principal and his teachers to comb the entire district, noting the various physical live in a few rooms shabbily furnished with no yards and no places to play. The remaining children live in well constructed apartment houses."

After the principal and his teachers were thoroughly familiar with their districts, they were ready for the second part of the study — that of determining how well the children knew their community and the attitude they had toward the physical features existing in the district.

Many conferences were held with the pupils during homeroom periods. The pupils were encouraged to talk about the community. They discussed the factories and the products made in them, the markets to which the products were sent, the means of transportation and the opportunities they had to visit them. They were encouraged to discuss their visits to the postoffice, the fire stations and the barber shops.

In the main, the children enjoyed the discussions and talked freely. The teachers tried to keep a record, informal it is true, of the findings of such conferences. These findings were later incorporated in the total report made by the principals.

Many conferences were held with small groups of pupils and with individuals. From these conferences the teachers and principals got leads that helped them in directing room conferences or in getting accurate data on pupils' attitudes toward particular items in their own communities.

Each principal summarized this section of the study by attempting to set down those physical features about which the pupils seemed to know and understand most and those about which the pupils seemed to know and understand least. The following statements taken from the report illustrate the manner in which the principals' summaries were set down.

"The elementary school children have little real knowledge about the industrial plants, although they pass the places often. Many children mentioned this fact regretfully and expressed a desire to see and understand the processes that take place."

"The children seem to know least about the common carriers."

The reports written by the elementary school principals at the end of the year were considered a progress report marking only one step in the whole program. Having a bird's-eye view of his district and some significant data on the pupils' understanding of the environment, each principal is now faced with a series of tasks such as the following:

1. What useful knowledge about a community should we help an elementary school child to obtain?

2. How far can we expect to go in helping elementary school pupils interpret the community in which they live?

3. What attitudes do we wish to build in elementary school pupils relative to their community?

4. Having determined upon the foregoing, what is the most efficient method of getting these things into the curriculum and the most efficient method of helping pupils acquire them?

The elementary school principals have merely touched the surface of what promises to be an extremely valuable three or four years' study.

Small Schools Can Be Good Schools

By ANNA SWENSON

In that part of Minnesota known as the Northwest Angle, sometimes called "The Chimney" by the children of the state, there are three small schools. These are isolated by miles of water in the expansive Lake of the Woods country. One of these is on Oak Island, one of the 14,000 islands in Lake of the Woods; the other two can be reached only by crossing miles of water from the mainland of the county to which they belong.

The American Point School is, with the exception of those in Alaska, the northernmost school in the United States. The pupils, twelve in number, are the children of fishermen and the men who accompany the fishermen to make boxes for shipping and to carry on the business activities of a small community. The resort business, which is growing tremendously, is also attracting some permanent settlers.

The school on American Point is housed in an attractive, comfortable little building, well lighted, equipped with good school furniture, a school library and good teaching material. A small electric light plant serves the school, the store, the homes and the fish packing plant. The teacher is a

graduate of a two-year teachers' college course and the school is in session nine months each year.

In order to visit the schools on the Angle, the county superintendent makes a trip that takes the major part of a day in a steam launch, or about an hour in a mail plane. In June five of the twelve children in the American Point School finished the eighth grade and are being given an opportunity to attend high school. Since they cannot be transported, their board is being paid by the county board of education.

It is obvious that in this situation and in many other isolated areas in which people have chosen to live, consolidation of schools is impossible. In other areas where conditions seem favorable, the movement is progressing slowly; however, for many years to come we shall have small rural schools. Even if we are not willing to admit that a one-teacher rural school can be equal to a well organized graded school, we cannot everywhere wait for consolidation or for county units. Children are growing up in these schools and everything possible should be done immediately to make them function desirably in the lives of these children.

Indoctrination? No!

By I. W. HOWERTH

BY INDOCTRINATION is meant the inculcation of opinions, beliefs and doctrines sanctioned by authority or tradition, or by both, without due regard to whether they are or are not supported by scientific evidence. This is not exactly the dictionary definition, but it seems to be the meaning implied in current discussions of the subject of educational indoctrination.

With this understanding of what is proposed, I maintain that the school, college or university is no more a place for indoctrination than the teacher's desk is a proper place for the doctrinaire and the dogmatist. It seems to me to be the very antithesis of genuinely scientific instruction.

Learning Has Idols, Not Masters

Said President Eliot in his inaugural address (1869), "It is not the function of the teacher to settle philosophical and political controversies for the pupil. . . . The notion that education consists in the authoritative inculcation of what the teacher deems true may be logical and appropriate in a convent or a seminary for priests but it is intolerable in universities and public schools from the primary to professional." Of the university he said, "A university is the last place in the world for a dictator. Learning is always republican. It has idols but not masters."

This is sound doctrine.

Formal education should confine itself to the impartial diffusion of knowledge, the development of the disposition and power to think, and the acquisition of the spirit and methods of science. Upon these, permanent and orderly progress finally depends. Every other asserted scholastic function not directly or

indirectly affiliated with these fundamentals is a delusion and a snare.

It may be safely asserted, I think, that civilization has been balked and is held back today more by the spirit of indoctrination than by any other one thing. It has perpetuated the cumbersome old and false, and has irrationally opposed the new and true. Opinions, beliefs and doctrines known for a thousand years to be false are still stubbornly accepted by the populace because they have been passed from one generation to another by indoctrination. This method of instruction has tended to destroy the spirit of free inquiry, to exalt belief without evidence as a supreme virtue and to penalize rational skepticism as a cardinal sin. It has perpetuated superstitions of every kind and prompted persecution-religious, political and racial. Educators should be and remain its inveterate foe. They should ally themselves with the spirit of science and not with the spirit of propaganda.

Indoctrination Is the Easy Way

It is because indoctrination is so much easier than the patient presentation of the facts upon which all true doctrines must rest that so many wish to employ it. As things are now, education must unfortunately concern itself to a large extent with "indoctrinating" the indoctrinated. Present the facts in their functional relationships and doctrines will take care of themselves.

Of course all advocates of indoctrination are convinced that their own doctrines are true and that those of others are false. But how were their own convictions formed? Probably by indoctrination. Indoctrinators are always "strong" on "eternal truths,"

"cherished beliefs," "the faith of our fathers," "the sacredness of the constitution," "the fundamental principals of Americanism" and the like, as they understand them, and are not greatly concerned with their scientific validity.

Anyone who even by implication so much as hints that doctrines should never be passed on as finalities, with penalties attached for doubt or non-acceptance, is denounced as an enemy of God and man.

"What," they say, "would you have the schools godless and unpatriotic!" Happy will it be for education when an educator so accused may stand up and say without fear of losing his job, "Better so, than to impose the crazy doctrines of the deity that some entertain and the false and vicious ideas of patriotism which many believe are essential to good citizenship."

True religion and true patriotism have nothing to fear from education so long as it is genuinely and primarily solicitous with regard to the truth, the whole truth and nothing but the truth as scientifically determined.

To assume that educators are all thus solicitous, and that therefore education may safely approve and adopt the principle of indoctrination, would be naïve.

Can't Agree on Doctrines

To illustrate: In the January (1935) number of the Social Frontier six contributing educators set forth their views on educational indoctrination. An analytical summary of their discussions shows that no two of them agree on the main issue, the abiding faith that should inspire workers in the field of education, the type of society for which educators should strive or what educators should do.

A preponderance of opinion is ex-



"Would you have the schools godless and unpatriotic?" they ask.

pressed in favor of "imposed instruction"—four being in favor, two against — but no two agree on what should be imposed. God's will, says one; the wishes of the dominant élite, says another; anti-Fascist sentiment, says a third.

On only one point is there complete agreement, and that is that educators should be partisan. But partisan as to what? God's purpose, says one; the dominant élite, says another; communism, says a third. "Social wholeness" has its advocate, as has also "individual and social self-determination," whatever these phrases may mean.

There is a general feeling expressed that something direful will happen if educators fail in their efforts to indoctrinate, but what it will be they do not know — tyranny, anarchy, educational mediocrity, decline of democracy, Fascism, betrayal of basic humanitarian values, are all prophesied. Well, how can they do anything but fail unless they can agree upon a fundamental conception to

direct their efforts? And what should be that conception and how should it be constructed? What can it be but a social ideal founded upon the facts revealed by the scientific study of society?

Kant was right, because he was scientific, when he declared that the "purpose of education is to train children . . . in accordance with an ideal conception of humanity." But that is "too general." So it is, but can it be made more specific? It can, and this should be the primary and insistent demand of educational thinkers. It is the only thing that will give education as a whole a true and unifying objective.

"If we are to take a scientific view of human efforts and satisfactions, such as shall furnish a basis for social reform," says J. A. Hobson in another connection, "we must have a social ideal constructed to accord with human facts and human possibilities, but transcending existing facts and furnishing us a test for conduct." So we must, and the true

basis of social reform is also the true basis of educational practice. An ideal conception of humanity either can or cannot be constructed upon the basis of human facts and possibilities by a thoroughly scientific study of society. If it can, educators should do everything possible to promote such study. If it cannot, education is destined forever to wander in the wilderness.

One thing is certain: If education is to practice, under the present condition of the study of society, the principle of indoctrination, it will get nowhere except into further trouble. The spectacle of the more than a million teachers in the United States setting out to indoctrinate the oncoming generation with their own social and pedagogically variant and questionable doctrines of social reconstruction derived from little or no knowledge of the structure, functions and possibilities of social life, would be both amusing and tragic.

Moreover, educators by advocating indoctrination play into the hands of the various pressure groups now trying to control the schools. They thereby signify the formation of still another pressure group zealously urging its own doctrines. If educators are to indoctrinate, why shouldn't others have a hand in it? Why, indeed, unless educators adopt and defend the demonstrably sound principles of scientific social research and truly scientific education! Educators should attack, not defend, the principle of indoctrination.

The one clear call to educators just now should be to recognize that all problems of social reconstruction are scientific problems, largely unsolved, and to insist upon the scientific study necessary to their final solution; to stand always and everywhere, in every grade and class of instruction, for the open mind, free inquiry, verified knowledge, freedom of teaching, contempt of bunk, hatred of shams, intellectual and moral courage and the admission to the schools of no beliefs, ideas or doctrines that cannot present credentials bearing the stamp of the best scientific thought.

The Gentle Art of Guidance

By WALTER CROSBY EELLS and HAROLD W. LEUENBERGER

N RECENT years American colleges and universities have shown a healthy tendency to meet charges of mass methods in education by turning their attention to individual student problems through the formation of student personnel and guidance agencies. The nature of the problems which these institutions are facing in their efforts to individualize collegiate education is shown in the results of a recent study.

In response to an invitation to submit problems in student personnel and guidance with which they were faced and which in their opinion merited discussion in the conference, fifty-nine institutions of higher education scattered throughout the Western states submitted constructive suggestions. Of these institutions, twenty were junior colleges, eleven teachers' colleges and normal schools, fourteen state colleges and universities, and fourteen privately controlled colleges and universities.

Main Worries Are Eight

The problems submitted were large in extent and varied in nature. Many were exceedingly difficult to classify. The problems given are summarized in the accompanying table. While some workers in the college personnel field will no doubt feel that some of the problems represented are foreign to student personnel and guidance, the fact remains that in the judgment of administrative officers of the responding institutions these problems are of a personnel and guidance nature.

Of the 241 problems reported, 208, or 86 per cent, fall within the first eight classifications. For this reason the remainder of this discussion will be concerned only with these eight divisions. Before presenting differences in types of problems reported by the various institutional groups, a

short descriptive discussion of these eight classifications is advisable.

Organization of personnel and guidance program accounts for 19.2 per cent of all problems submitted. Specific questions included here varied from "How can we convert the public to the idea of guidance in terms of the expense involved?" to the problem of defining the functions of each member of the service.

Vocational guidance includes the same percentage of the total number of problems as the first item, organization of the program. Examples of problems, aside from more or less general questions were: "How keep up the morale of graduates with no place to go?" and "Why do the Greeks feed more than half the school teachers of Chicago?"

Academic guidance makes up 16.8 per cent of the problems and here we find questions pertaining to orientation and "how to study" courses; degrees other than A.B. for students of low ability who demand four years of college, and the demoralization of good brains in undifferentiated high school groups. Judging from the last mentioned example, some college personnel workers occasionally fall into the habit too common among all classes of educators of placing the blame for their own ills at the doorstep of the educational unit next below them.

Social guidance and adjustment represents 13.5 per cent of the total. Questions here ranged from specific problems pertaining to the relation of the sexes to problems of guidance for a reorganized society. Such questions as the following were submitted: "How late should students be allowed to stay out at night?" "To what ex-

tent should members of the opposite sex be allowed to study or to be together?" One school faces the problem of "institutional policies and attitudes toward drinking, particularly when Congress makes drunkenness a patriotic duty."

The classification, records and research, which represents 10.6 per cent of the problems, contains problems pertaining to adequate personnel records, and research in problems concerned with student personnel.

Mental hygiene accounts for 9.6 per cent of the total problems. Questions regarding the set-up of mental hygiene programs, psychiatric services, and one "How can we develop technique without killing 'spark'?" were submitted and classified here.

Problems included under qualifications and selection of workers included questions both on the general aspects of the problem and such specific phases as "What mental hygiene understanding should a counselor have?" The percentage of problems falling here is 5.8.

The last item, selection and admission, accounts for 5.3 per cent of the total. Besides more general problems concerned with selection and admission of students, questions such as the admission of students "gifted in ambition but low in ability" and "How can high school data best be made available to college counselors?" were included.

Turning now to some of the most significant differences in types of problems reported by the various institutional groups, we find that junior colleges, teachers' colleges and normal schools, and state colleges and universities regard an adequate personnel organization as of paramount impor-

PROBLEMS OF STUDENT PERSONNEL AND GUIDANCE SUBMITTED BY WESTERN INSTITUTIONS
OF HIGHER EDUCATION

Type of Problems Submitted	Number Problems Submitted				
	Total	Junior College	Teachers' College and Normal School	State College and University	Private College and University
Number of Institutions	59	20	11	14	14
Organization of personnel and guidance program Vocational guidance Academic guidance and	40 40* 35	12 11 16	7 4 6	14 11 5	7 14 8
adjustment	28	8	3	8	9
Records and research	22	4	6	8	4
Mental hygiene	20	1	5	4	10
of workers	12	4	7	1	0
Selection and admission Leading students to think	11	1	10	0	0
independently	5	3	0	2	0
Orientation problems	5	0	0	2	3
Cooperation of faculty	4	0	3	0	1
Financial guidance	3	2	0	1	Ô
Dormitory problems	3	1	1	1	0
Health guidance	2	Ô	0	i	1
Interviewing Personnel policies in tech-	2	ō	2	Ô	0
nical institutions Cooperation of parents and	1	0	0	1	0
counselors	1	1	0	0	0
Guidance for women	1	0	0	1	0
Evaluation of guidance Evaluation of teacher ratings	1	0	1	0	0
by faculty	1	0	1	0	0
The Lower Division Plan Making guidance function in	1	0	0	1	0
life situations	1	0	1	0	0
sonnel work	1	0	0	0	1
education	1	1	0	0	0
No problems stated	8	3	1	ĭ	3

*Problems in this classification were specifically concerned with guidance during the present economic depression.

tance and further feel that their organizations in this field need improvement in greater or less degree. Privately controlled colleges and universities are either better satisfied with their organization, or do not feel that organization is of as much importance as other problems, or admit the importance of problems of organization but consider other problems of more immediate concern.

Problems of vocational guidance rank relatively high in importance in all types of institutions except in the teacher-training groups. The relatively low rank of problems of this nature in teachers' colleges and normal schools is as we should expect from these institutions. The great majority of students entering teacher-training institutions already have

their vocational choices made and, aside from placement problems, it might almost be said that teachers' colleges and normal schools have no problems of vocational guidance. Publicly and privately controlled colleges and universities and junior colleges, on the other hand, are facing all types of vocational guidance problems the extent and nature of which are more serious during the present instability of economic conditions.

Social guidance and adjustment problems are given a much lower relative ranking in teachers' colleges and normal schools than in the other groups. An explanation of this difference may be found in the type of person making up the student body of teacher-training schools. While being coeducational in nature, the

greater part of their student bodies is still composed of women. It is also to be hoped that individuals preparing for the task of teaching are of a type comparatively well adjusted to social conditions.

Another and more plausible explanation is found in the fact that teacher-training institutions are primarily professional schools and the students, having a constant goal toward which to strive, are less assailed by situations in which social maladjustments arise than are the students in the other types of institutions.

Mental hygiene problems are reported lowest in relative importance by the junior colleges and highest by the privately controlled colleges. Teacher-training institutions and state colleges and universities represented in the study rank these problems second, while other groups give them rank of six and seven.

Privately controlled institutions no doubt are in a better position to deal with problems of mental hygiene than are the other groups represented. The parents of their students are more able, financially, to cooperate in matters of personality and mental adjustment. In other words, privately controlled colleges and universities can "afford" a mental hygiene program. If this hypothesis is sound we may go a step further and hazard the opinion that provision for mental hygiene guidance is more prevalent in privately controlled institutions and naturally has an accompaniment in the number of problems recognized in this field.

The eighth item, problems dealing with selection and admission of students, is ranked lowest in relative importance by all groups except teachers' colleges and normal schools. The latter group considers selection and admission as of greatest relative importance. Reference to the table shows that with the exception of one problem reported in the column for junior colleges, all problems submitted in this classification came from teacher-training institutions.

At first sight it appears that teachers' colleges and normal schools are

the only schools which are at all concerned with the selection and admission of their students; or that junior colleges, state colleges and universities, and privately controlled colleges and universities are complacent enough to believe that they have no entrance problems because of adequate entrance requirements for all types and classes of students. It is possible, however, that many of the schools represented in this inquiry share the opinion of some authorities in the field of college student personnel that selection and admission

problems do not properly fall within the sphere of personnel and vocational guidance.

It is of interest to here note that 14 per cent of the colleges and universities reported no problems. In some cases the absence of reported problems was no doubt caused by lack of familiarity with conditions. Other institutions, notably those under Catholic auspices, reported that their faculties were so interested in the whole life of the students that problems of enough import to mention separately simply did not exist.

working experience in office practice and salesmanship in local stores and offices. Some pupils get this office experience in the offices of the board of education, superintendent and principal.

Another phase of our program is a placement bureau, which is carried on through the commercial department.

We have an annual Guidance Day at which speakers representing twenty-four vocations are invited to the high school. Each speaker addresses groups at two different periods, so that a pupil may hear a discussion of his first and second vocational choices. These speakers come from the leading professional schools and from industry.

In Huntington a survey of local needs has been made in order to assist us in our guidance work, and several new courses have been developed to meet the particular needs of the community. We hope that even more courses will be developed that will be of special service to our own locality.

To bring about proper pupil adjustments, we have conferences with parents in their homes. This has been valuable work, but in order to make the service more beneficial we need teachers with special training in guidance.

The problem method has been adopted in our classes in economic citizenship, and every available facility of our library is utilized in guiding our pupils in their pursuit of a better life.

Our present aim is to get teacherspecialists, more adequate research work and closer contact between school and community so that we may assist our pupils to make wise choices and adjustments in their homes, in school, in vocations and in the use of their leisure time.

This may be accomplished, according to Arthur Jones in his book, "Principles of Guidance," through information that is given the pupil or that he is helped to secure through habits, techniques, attitudes, ideals and interests or wise counsel.

One High School's Guidance Program

By RAYMOND C. BURDICK

Everyone realizes that there is real opportunity to improve vocational, educational and social guidance, as well as moral and physical guidance. In the high school at Huntington, Long Island, we have not overcome all of our shortcomings in this field because our educational program has not had the right set-up. Nevertheless we have made a beginning toward the development of techniques and now have a better understanding of our problem.

The great need is for better trained teachers and supervisors in this field. No adequate program can be evolved until teachers have a better knowledge of social needs and of problems in homes and industries.

More opportunities must be given to pupils to gain first-hand knowledge of the various trades and their vocational possibilities for the present generation. If the depression has taught us anything, it has shown how far removed our educational program has been from directing folk into fields into which they can earn a living.

Besides more adequately trained teachers, we need a reorganization of our secondary and college curriculums, as well as a closer tie-up between the school and industry. Such a program should give first consideration to research in order to learn the various factors that affect the aptitudes of pupils. It should then find ways and means to aid pupils in the specific vocation or in the general vocational field concerned.

The use of aptitude tests in such a program should be deferred until something more reliable has been evolved. Child accounting should include records of achievement and intelligence, academic accomplishment, family history of vocations and interests, the personality and character of the pupil and his individual special interests.

After obtaining such a record, we have found it important in our school system to tie up with some local organization in order to carry out the program. We have invited speakers from the Rotary Club to give talks on their various vocations to our classes in economic citizenship. Individual Rotarians have offered their services in an advisory capacity to pupils in the senior year and some of them have given apprenticeship work to those that were interested. We hope to carry this program further and to include in our program actual

Happy to Say

By WILLIAM McANDREW

BOUQUET for the month is due Helen Hefferan, member of the Chicago board of education, who, early and late, praised or slighted, supported by an intelligent majority or the only friend of education in a huddle of political yes-men, has contributed the experience of a teacher and the knowledge of a continuing student, with womanly sympathy and manly courage, to the great cause.

SIXTY-THREE years ago in "The Gilded Age" by Mark Twain and Charles Dudley Warner, the typical railroad conductor was painted as an extreme of the ill-mannered American. Today he is a pattern of courtesy. This is no accident. The men higher up have made manners a requirement of all railroaders who come in contact with the public.

N 1891, forty-five years ago, the same Charles Dudley Warner, an invited speaker at a convention of teachers in New York, told us it would be a happy triumph for us if people would naturally say: "as courteous as a teacher."

ANYONE who in these days knows, by contact, the educational meetings south of Mason and Dixon's line could say without stretching a point, "as well mannered as a Dixie teacher." In Northern Indiana I saw 2,000 or more teachers sit through a long program of music and speeches without any indulgence in whispering sociability. I know that such courtesy is duplicated in Massachusetts, Illinois, Michigan and Iowa. It is fair to presume that this is generally true elsewhere.

T is unlikely that this is mere chance. Good manners are not born; they are made. Someone responsible for these meetings is encouraging what is known as "audience courtesy." Superintendent Ritchie of McKeesport reminds teachers beforehand that a previous visitor has remarked on the gracious attention of the listeners.

THEN, again, manners have had a place in the regular instruction of schools for several years. You cannot teach a thing without learning a good deal of it.

THE hardest situation in the maintenance of good manners is when a teacher is abused by a complaining parent. Hotel managers and business executives train their staffs especially to keep their politeness in speech, tone and looks in similar circumstances. A superintendent or principal may well devote attention to this weak spot at staff meetings three or four times a year, giving a detailed demonstration of how to handle oneself in a bombardment by a parens iratus. Don't defend; don't fight; use the business formula, "I am sorry you took offense, for none was intended."

ONE never comes out of the classroom of a real teacher the same person who went in. He knows more, feels more, is more intellectually or emotionally or socially.

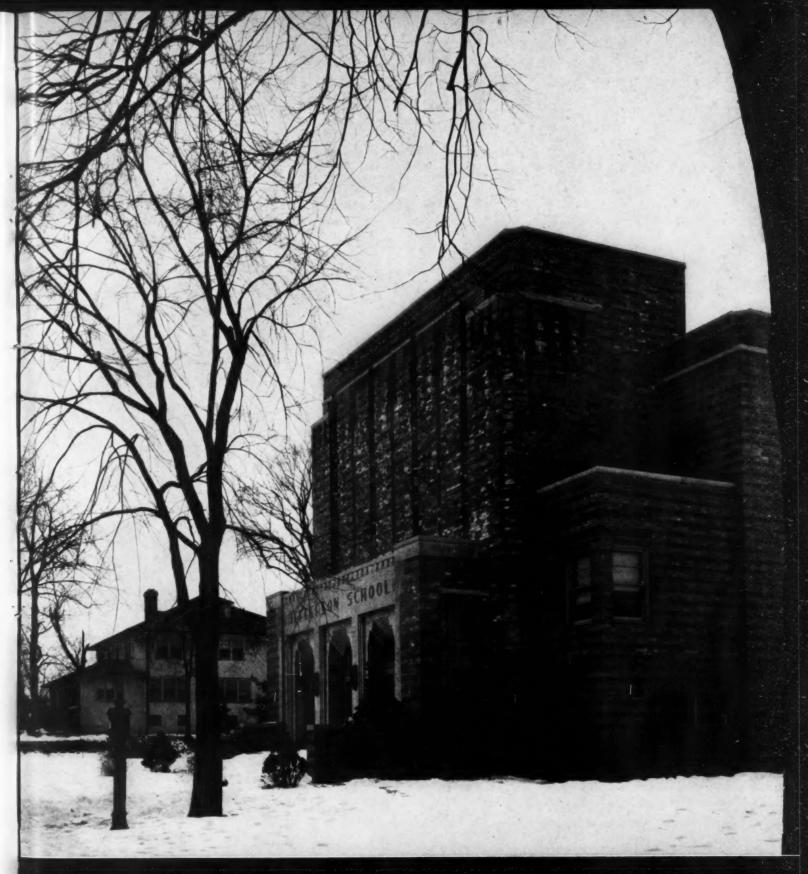
ON'T swap horses while crossing the stream" applies as well to education as to other human enterprises. Education is crossing a swift and turbulent stream. The stream is swollen by prejudice against the schools which the people once highly respected. Masses of the driftwood of public opinion are beating against the school, fabricated by charges of waste and extravagance by chambers of commerce, taxpayers' associations and such. Eddies of insinuation that the public schools are responsible for most of the social and moral ills of today are trying to suck us under.

Perhaps the old horse that we have been riding is somewhat sprung at the joints and shows his ribs, but he has been a good and faithful horse and reliable up to this extraordinary time. We know nothing about this new sleek horse which social theorists have pictured in their imaginations as the right one for the schools to ride. We have a feeling, to be sure, that he will be different from the old one. He may appear as a new social order, or new and hitherto unheard of educational objectives. He may require us to discard all of the old ideas that have served so well, but of these things we are not sure. We would do well, therefore, to struggle on with the old steed until we can see the other shore.

Meanwhile, we need to be thinking, studying, trying to comprehend the significance of the newer social trends so that when we do get across, we shall be able to swap horses wisely.

There is nothing wrong about "looking a gift horse in the mouth," especially one that is offered by those whose knowledge of horses is only theoretical. It might prove to be a Trojan horse with a bellyful of destroyers ready to overthrow what we have been working for years to establish. We shall have time to swap horses when we get across the stream. Our chances of getting over safely are better on the horse we know than on a strange one which may unload us mid-stream into turbulent waters.

—EDWIN C. BROOME.



THE SCHOOL PLANT



Utility and Beauty for \$298,000

By HAROLD F. STUDWELL

ERE is a school that was not erected to keep up with the Joneses. In a district of little more than 5,000 population with a comparatively small assessed valuation, this addition to the educational system was an outgrowth of necessity. There could be no luxurious suites, no elaborate ornamentation. Double-utility was the watchword but the people wanted a building that

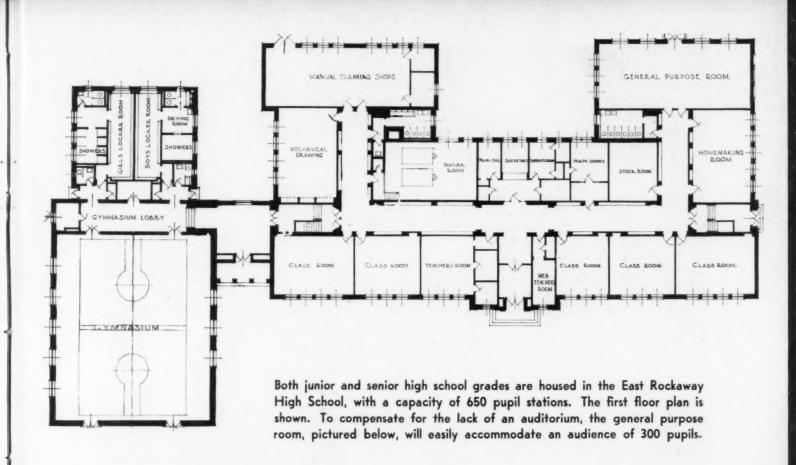
Double utility was the watchword for the new Junior-Senior High School at East Rockaway, N. Y., according to Mr. Studwell, superintendent. Therefore, let us inspect particularly the group assembly or general purpose room, which he describes in detail. would add charm to their already attractive community. With this dual objective in mind the architects went to work.

For years the senior high school pupils at East Rockaway, Long Island, had been farmed out to other districts in the suburban area. Early in the depression there was local sentiment to build a new school for secondary work but the tension of the times led only to wishful thinking. After several years, however, these neighboring high schools became so crowded that they were adequate only for the resident enrollment, and resolutions were being passed that would eventually leave the nonresident out in the cold. This situation, plus a PWA grant, was the deciding factor in the final approval by the voters for the new six-year unit.

Among the obstacles in obtaining the necessary votes was the old problem of securing suitable acreage in a suburban village about ten miles from the New York City line. Only one location in the district seemed ideally situated and to this site there were two main objections—the price was \$12,500 an acre, and there were only four acres to be had at that price.

Consideration was then given to acquiring fourteen acres of swamp land, situated on the easterly boundary of the district and belonging to the Town of Hempstead. North and south this tract was in the exact center and on the basis of distribution of population this was true also. That it was off center east and west was not a serious handicap because the district is long and narrow, being only about a half-mile in width.

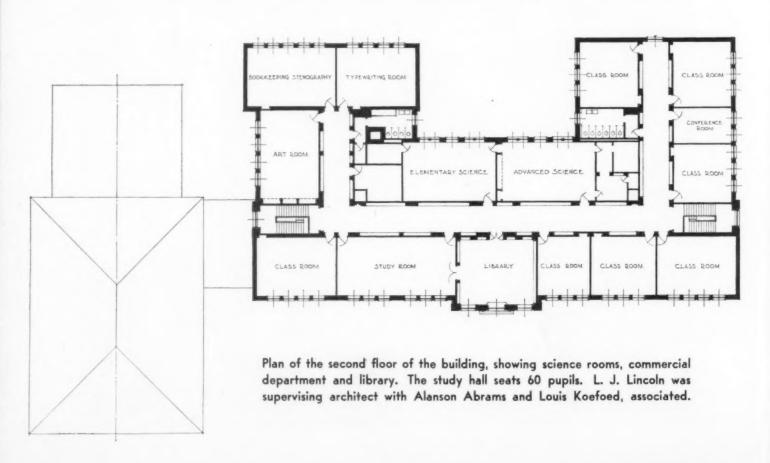
Die-hards claimed that the land could not be acquired. Other attempts to obtain land from the town in the past, they pointed out, had failed.







The orchestra practices in the general purpose room, and dramatic productions are given. Adjacent to the homemaking room, it is also adaptable for serving hot food to pupils who remain in school for lunch.



But at a general election in which both leading political parties endorsed the proposition, the people of the town voted to sell these fourteen acres to the people of the school district at a nominal cost of \$500 an acre. Even then, unwilling to accept defeat gracefully, the local opposition christened the new building to be "the school that will rise and fall with the tide."

Actually the new building is one more monument to the achievements of modern engineering. The foundation is concrete piling, reenforced and cast in place in steel shells. Its construction is steel framing with reenforced short spans. Interior partitions are of precast cinder concrete blocks and the floors are concrete. Exterior walls are brick. The structure contains approximately 670,000 cubic feet.

Heating is by means of a low pressure steam vacuum return system with steel fire tube boilers and oil burners. Ventilators are of the unit type and there is a compressed air temperature control.

The building is equipped throughout with intercommunicating telephones, also a complete time and program system with self-correcting electric clocks. A public address system connects by loud-speakers to all rooms from three separate microphone inputs, including the central office. Radio and phonograph features are included.

The architecture is colonial. Exterior walls are of shale face brick and the roof of Vermont slate in blue and gray. A cupola of frame construction contains an old school bell which had summoned the parents of the current generation. At the dedication of the new building this bell, which the pupils had ordered gold-leafed and appropriately inscribed through voluntary contributions, was presented to the board of education by the president of the student council.

On the interior the appearance is neat and pleasing. In the corridors the floors are made of linoleum tile and the walls lined with built-in steel lockers. Corridor ceilings are of acoustical plaster. Travertine walks with terrazzo floors lead into the main lobby, which has a Levanto marble base and trim. Wood block flooring is used in the gymnasium with a brick wainscot and cement plaster walk. Acoustical plaster has been applied to the gymnasium ceiling also. In the library the flooring is sheet linoleum with American oak paneled walk and shelving.

All the toilet and shower rooms have a colored tile walk and floors with a slate base. The classrooms have asphalt tile flooring, cement base, and plaster walk and ceiling. All windows have wood sash and trim with black slate stools.

Both junior and senior high school grades are housed in this building, which has a capacity of 650 pupil stations. There are nineteen classrooms in addition to the gymnasium, group assembly room, metal and woodworking shop, homemaking room and library. One study hall is provided which seats sixty pupils.

The group assembly or general purpose room is one of the most interesting features of the building. Designed to compensate for the lack of an auditorium it is large enough to accommodate an audience of 300 persons. A small stage makes it especially suitable for music and dramatic work when not in use for assembly. Another advantage of this room is its location, adjacent to the homemaking room, which makes it readily adaptable for the serving of hot food to pupils who remain at school during the lunch period.

Exclusive of land, the building was constructed under the Public Works Administration program for \$298,000. This included equipment, architects' fees, hydraulic fill, diking and temporary roads.

Two smaller bond issues, in addition to a government loan of \$225,-000, were found to be necessary in order to complete the project. One of these-for \$20,000-was used for additional equipment, bicycle shed, and the like. Another small issue will be needed to complete the grading and landscaping next spring. Total bonded debt on the district for the new school, when finished, will be at least \$30,000 under the originally authorized issue of \$295,000. The people seem to feel that in the sturdiness and charm of this building they have full value for their money.

What Is Air Conditioning?

The term ventilation is gradually disappearing from use and has been superseded by the term air conditioning, says *Domestic Engineering*.

When supply air is delivered into a room with the temperature, humidity and air motion simultaneously controlled, it is termed air conditioning; when the temperature and humidity of the air are controlled by the addition of heat and moisture only, it is termed winter air conditioning. If the temperature and humidity are controlled by the elimination of heat (cooling) and the removal of moisture (dehumidifying) only, then it is termed summer air conditioning. Systems performing both functions, that is heating and humidifying in

winter combined with cooling and dehumidifying in summer, are termed complete or year 'round air conditioning systems.

About the only place where the older term, "ventilation" still may be applied is on exhausts for such rooms as kitchens, toilet rooms, boiler rooms, where no supply is furnished except as provided by leakage from the outside or from other parts of the school building.

Care should be taken, however, not to apply the term air conditioning too loosely, as it should be used only when the air systems include at least the three essentials of simultaneous control of temperature, humidity and air motion.

Using fume hood

Remodeling—A Study

By ARTHUR B. MOEHLMAN



Hobby laboratory



Experiment

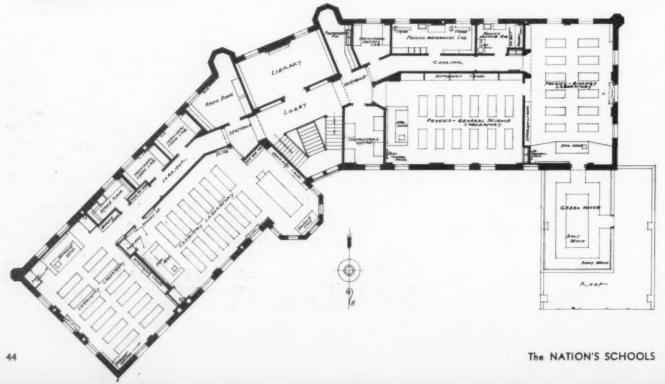
needed some new science laboratories to replace the original instructional facilities in this field. The Culver Educational Foundation, under whose auspices the academy is operated, was confronted with the choice of erecting an entirely new building for the science division or remodeling the existing unit. Both possibilities were carefully studied and final approval was given to the remodeling project.

Plans were accordingly made to meet the requirements of an ultimate enrollment of 600 in grades 10 through 14. Experience has shown a science enrollment far beyond that of the ordinary secondary school because of the unusually large number of cadets preparing for institutions of higher learning. Two chemistry and approximately one and one-half physics laboratories were demanded. There was also sufficient need for slightly more than one-half a labora-

tory in biology and in general science. The new plan of instruction adopted at the academy was based largely upon the technique of individualization and self-directed study. This program also envisaged a need to care for the carry-over interest of the adolescent boy into his leisure or hobby interests.

A specialized library, definitely oriented to the laboratory work, and individual hobby laboratories were required to meet these instructional and administrative demands. The older staggered double period plan of class meetings was to be replaced by five single periods per week. Discussion and laboratory work were to be interchangeable. After the educational requirements had been prepared and the physical needs roughly prepared, considerable study was necessary to fit them to the physical area.

The problem was limited by the fact that only a certain inelastic area



in Contrasts

was available in which to meet all of these unusual conditions.

A centered open stairway and two diagonal wings created a traffic and safety problem. Slightly different dimensions in these wings automatically placed the chemistry laboratories to the left of the stairway and the combination laboratories — physics-biology and physics-general science — to the right. A three-story lateral wing made it possible to place the vivarium and herbarium for the biology laboratory immediately adjacent to the biology laboratory, as will be seen from the floor plan.

With the general location of the laboratories adjusted to the total area, it was possible to center the science library directly between the laboratories. By designing each unit with a small vestibule and with parallel exits, it was possible to provide sufficient traffic area and practically eliminate the hazard of the lateral stairways. Architectural treatment of the entrance lobby created the feeling of an almost separate unit for the library, lobby and stairs.

Individual hobby laboratories in all of the sciences, together with a special mechanical laboratory for physics and a chemistry storeroom, were built along the front of the building. Offices for the instructors were provided in one room close to the library. The result was a clean-cut plan, with a minimum of traffic hazards, easy to administer.

Within each laboratory all dust ledges were carefully avoided by designing built-in cabinets and shelves. Sufficient wall area was used to make it possible to keep all apparatus behind glass doors in each laboratory



A well equipped physics laboratory replaces the outdated laboratory at the right.





An attractive new chemistry laboratory (below) supplants the one at the left.



and thus quickly available for use.

Dual purpose laboratory furniture was used so that the older plan of a separate lecture room for each laboratory was easily dispensed with. Each laboratory became both laboratory and classroom, depending upon the instructional plans of the teacher. The absolute capacity of this unit is 576 students on a six-period day.

The possibilities of remodeling in contrast with new building were never more vividly demonstrated than in this instance. It is much simpler to tell the balance of the story in the series of contrasting pictures taken

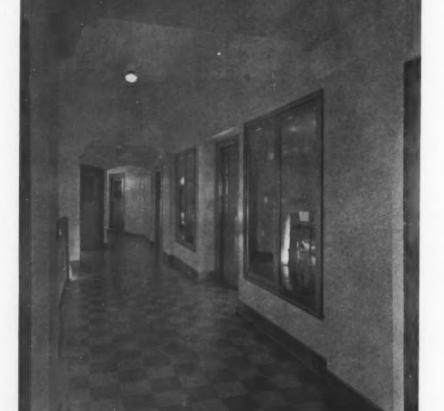




One corner of the science library and (below) the trim new entrance corridor in contrast with the dingy former entrance hall at the left. before and after the reconditioning changes had been made.

These are presented on this and the preceding two pages. Time was a definite factor at Culver. Reconditioning work was started with the close of school in June. All existing partitions and other work were quickly eliminated and then the new work started in the cleared area. The laboratories were completed in time for fall classes. Sound reduction material was used both on floor and ceilings. The work was done by the academy's own maintenance men.

The architect for the remodeling project was William D. Cuthbert of Ann Arbor, Mich.



Exhaust Fans and Heating

The purpose of the exhaust fan is to move air from the building and discharge it outside. When outside temperatures are such that the heating plant is in operation, it means that more heat must be supplied to replace the loss of air. This, of course, has a definite effect on heating costs. For that reason exhaust fans should not be used indiscriminately, but according to a definite schedule so that air is changed only in the volume which is essential to good ventilation.

We Need Visual Aids

By JOHN W. STUDEBAKER

THE tensions and torsions accompanying the present rapidly changing social order have greatly complicated the educational process and have forced the learner to master and coordinate a bewildering number of facts if he is to lead a happy and socially useful life. The problem of the worthy use of increased leisure time has been of growing significance during the last five or six years.

Radio and motion pictures occupy important places in America's recreational life. The influence of radio and photoplays upon thinking is evident when one reflects upon the fact that there are 655 radio stations included in the vast system of broadcasting that has developed in the United States during the last eighteen years. Nearly 23,000,000 American homes own radio receiving sets, which are operated on an average of two to three hours daily. There are 3,000,-000 radios in automobiles. Approximately 500 feature photoplays and many short subjects are made annually and exhibited in 15,000 theaters to approximately 90,000,000 people each week.

It is estimated that the 33,000,000 persons who go to some kind of school at some time each day in the United States spend about 825,000,-000 hours per week in school, as compared with 225,000,000 hours per week that people spend in our theaters. Yet the recently completed National Visual Instruction Survey, covering approximately two-thirds of the total enrollment in all public and private schools throughout the country, discloses that there are but 10,097 motion picture projectors reported as being owned by the school systems replying to the survey questionnaires. Of this number, less than 800 are equipped for sound.

The survey further reveals that there are only 11,500 radio receiving sets and 850 central radio sound systems owned by the schools that reported. There are some 280,000 elementary and secondary schools in the United States, more than eighteen times the number of film theaters, and more than 430 times the number of broadcasting stations.

It would appear from these facts that while mechanical improvements in the commercial entertainment field march steadily forward, the use of these improvements, so necessary for better transmission of modern educational ideas in a modern way, lags far behind in our nation's schools. Mechanical and nonmechanical audiovisual aids to instruction for the intellectual development of the young people of this country are clearly of vital importance. Present day social problems, arising out of the complexities of our times, will be effectively solved only in the degree in which the teacher is given the help that mechanical devices are now able to furnish.

The National Visual Instruction

The National Visual Education Directory issued by the American Council on Education, Washington, D. C., lists by city and state the 81,000 schools responding to this survey; the visual education director or the person most interested; the number of buildings; enrollment; whether the school is electrically equipped or not, and an inventory of all visual aids in use.

Survey, directed by Cline M. Koon, specialist in radio and visual education of the U.S. Office of Education, assisted by Allen W. Noble of the American Council on Education motion picture project, reveals (1) frequency of use of various audio-visual aids in the classroom; (2) all types of audio-visual equipment owned by schools reporting, and (3) problems arising in administration of a program of audio-visual education. The survey covered approximately 81,000 schools serving nearly 17,000,000 pupils, most of whom were enrolled in urban areas. Questionnaires were sent to schools in all towns of 5,000 or more population.

As to the frequency of use of the various audio-visual aids in the schools responding, the survey reports were classified as to size of schools. The groups selected were schools and school systems of less than 750 pupils, those with enrollments of 750 to 2,499, 2,500 to 9,999, and those of more than 10,000.

In addition to mechanical devices, nonmechanical aids such as objects, models and specimens, wall maps, charts and graphs, mounted pictures, posters and cartoons were shown in the survey as being in wide use. All types of aids in this category showed a strong similarity in their relative frequency of use. Being inexpensive and for the most part easy to obtain, their use is more widespread and more frequent than mechanical aids. The extent to which they are used progresses in direct ratio to the size of the school system using them.

Mechanical audio-visual aids, which include motion pictures, lantern slides, film strips, radio programs and phonograph records, are quite understandably not employed as widely in education as the simpler nonmechanical aids. The survey, however, brought to light the rapid rate of growth in schools of both radio programs and motion pictures. In the larger systems, a greater and more uniform use of all audio-visual aids was reported.

Lumping together mechanical and nonmechanical aids, it is interesting to analyze the frequency of use, as reported by the survey, of all the various aids in the different pupil groupings. For instance, the use of wall maps holds first place, from the smaller schools through the largest. The use of charts and graphs comes second, up to the 2,500 level. In the higher levels, posters and cartoons rank second, charts and graphs third. On the other hand, posters and cartoons rank third in the small institutions. Fourth place went to mounted pictures throughout the various levels. Likewise, objects, specimens and models were uniformly fifth in rank. Next in order of use came phonograph records.

The use of radio programs shows a wide variation among the different enrollment levels. In the smallest schools, that is, in those serving fewer than 750 pupils, the use of radio ranks seventh. In the next level, 750 through 2,499 enrollment, air instruction falls back to ninth place. In schools serving from 2,500 to 10,000, radio is next to last in frequency of use. In the largest schools it ranks last. Survey findings indicate that while the use of airways for learning appears to drop as the pupil enrollment increases, actually the radio is more widely used in larger schools, although other audio-visual aids outrank it in frequency of use.

Many Have No Electricity

Use of motion pictures ranks eighth in all enrollment levels. Next in the smallest schools is the use of lantern slides, although this device ranks seventh from the 750 student level up. Likewise, stereographs show next to last in the two lower levels, while their use ranks ninth in the upper brackets. Least of the visual

aids to be used are film strips and still films, with the exception of the largest schools where this method of education outranks radio programs by a fraction of a percentage point.

The survey brought to light a significant point. Nearly half of the schools reporting had no electric service and were thus greatly limited in the use of audio-visual equipment. In spite of this fact, two-thirds of the school systems reporting make some use of such equipment in their teaching.

A glance through the total inventory of mechanical visual aids reported by the schools circularized by the National Visual Instruction Survey is revealing to say the least. The following equipment was listed as being owned by the school system reporting:

17,040 lantern slide projectors

3,007 still film attachments

2,733 film strip projectors

2,073 micro-slide projectors

2,720 opaque projectors

6,074 16-mm. silent motion picture projectors

458 16-mm. sound motion picture projectors

3,230 35-mm. silent motion picture projectors

335 35-mm. sound motion picture projectors

11,501 radio receiving sets

841 centralized radio-sound systems

In addition to this owned equipment, many pieces of apparatus were reported as rented or borrowed. Many radio sets installed in schools, for example, are the personal property of teachers or pupils. Many of them belong to student clubs. Other equipment actually in the school may be the property of persons who leave it there for demonstration purposes.

The survey quite generally discloses the fact that both our public and private schools are poorly equipped to get the ultimate results attainable through a more widespread use of mechanical and nonmechanical audio and visual aids. The means thus offered of graphically and entertainingly presenting to the pupil vital facts in the study of science, geography, history, social science, health, English, nature study, commerce and

industry—indeed of practically all subjects included in the school curriculum—should be utilized to the fullest extent. It is interesting to explore the reasons given in the survey as to why audio-visual equipment has been slow in getting a foothold in our schools.

Budget Does Not Permit

The greatest handicap reported was the lack of sufficient budgetary provision for this work. Next was the fact that the schools were unable to get the proper aids in the classroom when they were needed most. The third greatest difficulty was the declaration that the teachers were insufficiently trained in the use of visual aids. The fourth complaint was that the available aids fail adequately to cover the course of study. Fifth, a lack of understanding of the value of visual aids was reported. The sixth difficulty recorded was lack of information on sources of desirable films and other aids.

A blank space on the questionnaire used in this survey allowed city and county public school superintendents and principals of private high schools to express any other difficulties not listed. Many superintendents, principals and visual education directors wrote that they were personally in favor of using visual aids and that their teachers were reasonably well trained in the use of such equipment, but that they were unable to convince the school board and others in control as to the merits of visual aid use. This may well be termed a lack of understanding as to the value of such aids.

In an effort to determine how these difficulties might be overcome, the survey listed several suggestions and asked that these be checked according to desirability. By far the greatest interest was centered upon some plan being formulated whereby equipment could be purchased with the assistance of some federal agency. School people expressed the need of assurance that such equipment purchased would be standard as to quality and size in order that films could be se-

cured. Many educators reported the sale of odd-sized and obsolete equipment to schools and school boards, little use of which can be made.

Demonstration lessons in the schools, by visual instruction experts, was the suggested plan next in popularity. Then came the expressed need for lesson plans to aid in correlation of visual aids with the course of study. Ranking fourth was the need for additional motion pictures produced for instructional purposes. It was also suggested that visual instruction centers offering courses to teachers be established. There seemed to be a difference of opinion on the last point, and the most expedient manner of bringing it about, because many school teachers have had little or no training in use of visual aids.

Three courses are open. The first is that the teacher be required to attend a university or college to secure this training. Several states already require this of new teachers. The main problem, however, lies in training those who have met the requirements imposed prior to this time and who are now teaching. The second alternative is to require the teacher to take a course in use of visual aids from an extension division of one of the many universities offering such a course. The third way to train the present staff is to employ a supervising teacher of visual instruction whose duty it should be to work with teachers and show them how to make the best use of various visual aids, and plan and assist in selection of films and slides to be used by the entire school system. Several school systems have reported that the last course seems the most expedient and flexible, and has been successfully

Another development desired by educators, according to their reports, is establishment of some group or groups to give expert evaluation of educational films and other visual aids. Many superintendents of schools and directors of visual education reported that they have been frequently disappointed in the content of the film and that the captions supplied

have been found inadequate and often misleading.

This National Visual Instruction Survey made by the Office of Education and the American Council on Education has revealed many important facts and statistics. Teachers, principals, superintendents, visual education directors, school board members and producers of audiovisual aids all will do well to study the survey report. It should point the way to a larger production, distribution and use of such equipment for educational purposes throughout the United States and its territories.

When Choosing a Custodian

For custodial work, young, vigorous and healthy men are required, and if any suggestion of the traditional idea prevails that custodianship is a type of pension plan for older and disabled people, it should be eliminated from the public mind."

Thus reads the Strayer-Engelhardt report of the survey of the schools of Evansville, Ind., made in 1935-36 by the Institute of Educational Research, Teachers College, Columbia University, and published in late October.

"The recruiting of an active, ablebodied and alert group of custodians and matrons, skilled, drilled and informed in their duties and responsibilities should be the aim of the Evanston school city," the report states. "A reasonable amount of education (not below the eighth grade level) and possession of intelligence should be required of all candidates."

The survey report recommends that Evansville set up a definite school for the training of custodians and maintenance men, as a source from which will be secured the men and women who can later be taken on as fulltime employees in the school system.

Members of the maintenance staff can be trained to be "handy men," able to take care of any ordinary repair or renovation job, and all custodians should be encouraged to make repairs lying within their ability, thus reducing the demands upon the central office.

Time and frequency schedules should be developed for all the duties of custodians and engineers, the report suggests. These schedules should be developed from information gained by written reports of the head custodians, from inspections made by the director of buildings and grounds, from schedules of classroom teaching, and from the use of a check list in conjunction with the inspections.

In addition to recommending additional storeroom space for many buildings, the report emphasized the need for fireproofed storage space for oils, wax and greases, as well as for paints and varnishes.

Another suggestion made to the Evansville board of education was that members of the school maintenance force might be used as drivers of school-owned busses.

Lessening Dish Breakage

When the dish breakage at a large university food service totaled 95 per cent during one year, a study of means to alleviate this high percentage was begun. It was found that a cup should be chosen that does not flare dangerously high above the saucer, and the handle on the cup should be an integral part of the whole cup.

Glasses should be shaped to prevent stacking; it is impossible to pile barrel shaped glasses inside each other. Pitchers should have a broad base so that they will not upset.

Small dishes should be heavy enough in weight so that they will not slip through fingers too easily. A dish washing rack for cups, constructed so that cups fit into it and are separated, reduces one hazard.

Better Plant Practices · · ·

Notes From a Week in St. Louis

"This is how they do it in St. Louis." Reference to a much thumbed notebook and a hasty calculation of almost indecipherable memoranda have started discussion in school systems throughout the country ever since the trek homeward from the convention of the National Association of Public School Business Officials. Not that all the ideas unveiled during those crowded five days are applicable to other school systems, but they form a basis for comparison at least. As one visiting member put it while inspecting the machine shop of Hadley Vocational School, "Why, that one piece of equipment probably represents more money than our entire shop layout." Interesting nevertheless and instructive

Business of Making Something for Nothing

It is surprising what can be done in salvaging various items in common use in schools. Visitors inspecting the salvage and repair division of the St. Louis schools on Thomas Street had their attention called particularly to compound microscopes in process of rejuvenation. Approximately fifty such instruments, representing a total value of about \$3,500, have been treated at an average cost for parts and labor of \$1.50 each.

A number of analytical balances, too, worth from \$100 to \$200 each, have been repaired and returned to service at the cost of labor only. Several, in fact, were almost completely assembled from salvaged parts.

Odds and ends of useless drawing instruments and their parts find their way to the department from various schools throughout the city. Sometimes they are made up into sets of instruments, but more frequently into instruments.

Last but not least, a quantity of dried up water color paint was actually turned into useful show card paint.

What Price a Good Custodian!

Then there is the set-up for custodian service. All custodians and some matrons are employed on a twelve-month basis; other matrons are employed only during the school term. White custodians and matrons are employed at schools for white pupils, and colored custodians and matrons at schools for colored pupils. The schedule of salaries for elementary schools follows:

> Class A Elementary Schools, 24 to 28 Classrooms

head custodian.....\$163 per month
 assistant custodian... 137 per month
 matrons (school term) 85 per month
 Class B Elementary Schools,

18 to 24 Classrooms

1 head custodian.....\$156 per month 1 assistant custodian... 131 per month 1 matron (school term) 85 per month

Class C Elementary Schools, 12 to 18 Classrooms

1 head custodian.....\$150 per month 1 matron (12 months). 85 per month

Allowances for high schools and the vocational school vary in accordance with the size of the school. Allotments consist of one head custodian at \$187 or \$170 per month, according to the size of the school; assistant custodians at \$137 per month and matrons for the school term at \$85 per month.

Newly appointed custodians are classed as assistant substitute custodians and receive a salary of \$125 per month. They are used in the administration building of the board of education, where they are taught methods of sweeping, dusting, window cleaning and the general duties of custodians. After a period of thirty days they are eligible for use as substitutes for assistant custodians who may be absent from their schools.

When a custodian has shown proper ability as a substitute custodian he may then be appointed as an assistant custodian in a Class C school, heated by direct radiation and having no mechanical ventilating plant. His next promotion is to a school having a plenum system of heating and ventilating, where he learns to operate this type of plant.

After serving in several schools of the latter type he is given an examination by the chief engineer of the board of education to determine whether he is qualified for a position as head custodian. This is a rigid examination and the custodian is required to show that he is capable of operating all types of boilers and engines and other heating and ventilating apparatus used in the elementary schools. If, in the opinion of the chief engineer, the custodian is properly qualified, he is again placed in

the administration building subject to call as a substitute for head custodians. After a reasonable period of this service he may be appointed as head custodian in a Class C school and from there promoted to a Class B school, and then to a Class A school, finally becoming, if properly qualified, a head custodian in a high school.

Detroit Is Heard From on Custodian's Salaries

Speaking of salary schedules for custodians, Detroit is now heard from. It is L. R. Rich, director of the personnel department of the board of education, speaking: "Assistant custodians," he explains, "receive \$120; custodians of Class E schools, \$130; custodians of Class D schools, \$140; custodians of Class C schools, \$150; custodians of Class B schools, \$160, and custodians of Class A schools, \$170.

ass A schools, \$170.	
His line-up for engineers is as	follows
Helpers	.\$140
Firemen	. 160
Engine tenders	. 170
Engineers	
First assistant engineers	. 200
Class L schools	. 190
Class K	
Class J	. 220
Class I	
Class H	. 240
Class G	
Class F	. 260
Class E	
Class D	. 280
Class C	. 290
Class B	. 300
Class A	
Assistant supervisors	. 330

New employees are inducted as assistants and promoted to greater responsibility if their work warrants.

Time to Think About Christmas Cleaning

George W. Sanger, commissioner of school buildings in St. Louis, believes in looking ahead, particularly when it comes to cleaning during the Christmas holidays. This is the program he follows:

The custodian first confers with the principal in reference to instructing the teachers as to the removal of papers, drawings and Christmas decorations that are of any value from the bulletin boards or rail above the blackboards. Then he proceeds to (1) brush all walls and ceilings; (2) dust all window shades; (3) wash all furniture; (4) clean all electric fixtures; (5) wash all blackboards; (6) scrub the entire building, and (7) clean all glass.



Two Stories for Sport

By H. J. CARLSON, F.A.I.A.

GIFT of \$75,000 covered the cost of the new gymnasium of the Maine Central Institute at Pittsfield, Me., and left a small fund for maintenance. The building is located on the grounds in accordance with the general development layout and is the second unit to be erected, the first being a boys' dormitory.

It is a two-story structure, 88 by 72 feet. The upper story has a gymnasium, 85 by 67 feet, lighted on three sides with a clear height of more than 20 feet. The exterior is red brickwork, and wide molded white

window and door architraves give a richness to the various elevations.

The building is entered by a short flight of granite steps through a classic doorway in limestone. Over the doorway is a large limestone panel with the inscription, "The George M. Parks Gymnasium."

Over the front entrance, in fact over the whole end of this side of the building, is a balcony capable of holding some 150 people. Below this balcony on the floor are fold-up bleachers with an additional capacity of 160—or more than 300 in all. The balcony is filled and emptied from its

two ends by means of fireproof enclosed stairs down to ground exits.

The visitor enters a tiled memorial lobby with a vaulted ceiling, with built-in cases for athletic trophies and with an oil portrait of the donor, balanced on the opposite wall by a memorial tablet. The floor is of rubber tile in squares of alternating color. To the left of the lobby is a storage room for gymnasium equipment; this room will be used for a kitchen and serving room when the large gymnasium is used for banquets. This serving room has a stair access to the outdoors and to the basement.

Next to the lobby on the other side is an office with a Dutch door that can be used for ticket taking, and behind this is a locked supply



room which can be reached either through the office or the gymnasium.

The interior walls from floor to ceiling are of a fireflashed brownish tile, which makes a good background. The floor is laid out the long way for basketball games and the short way with two practice basketball courts, with a net between. The ceiling is paneled in 3/4-inch composition material, finished in natural colors, and

Floor plans of the lower and upper stories of the new gymnasium of the Maine Central Institute, Coolidge and Carlson of Boston, architects. The lower story is divided into two sections—one for boys and one for girls—each reached by separate stairways. Each division has its own shower and locker rooms.

GYMNASIVM

56 × 85

Folding the Diagonera

Gallery GVEP

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ENTRAGE

this has acoustical as well as insulating value. The general lighting units are sunk into the ceiling and are rectangular in shape.

All of the main floors except the lobby are of 1½-inch white maple laid over a planking to give the necessary resiliency as well as sturdiness. The base is of steel angle irons built into the wall with slotted grooves so it can be dropped as the wood in the joists contracts in its drying out. The wood finish throughout is oak and the amount of woodwork is reduced to a minimum because of the tile walls. The girls' shower and dressing rooms and all toilet partitions are steel with enameled finish.

The lower story is divided into two parts—one for boys and one for girls, each reached by separate stairways. Each division has its own coat rooms, toilet and locker rooms. The shower rooms in each case are divided so as to give any visiting team separate rooms with showers, lockers, toilets and a place for coaching. The boys are showered in an open space, while the girls have individual dressing rooms and showers. There is provision for a rubbing room and field storage.

The building is lighted by electric lights, controlled from key switches or cabinets so as to be out of general reach. The heating system is from a sectional steam boiler which, in addition, supplies hot water for the storage tanks. The main gymnasium is heated by four thermostatically controlled unit heaters, giving a uniform temperature throughout the room. All water piping is copper and all exposed piping is chromium plated.

The concrete floors of the basement, laid over a gravel fill, are reenforced with steel and treated with a surface hardener. The coal room is so arranged below grade that coal from trucks can be slid directly into place, while coal is fired into the heater by means of a stoker.

A large shop is provided for repair of apparatus and general upkeep, and the building is as complete as it can be made, including mats, apparatus and similar equipment.

Safety First

Technical High School, Chicago, is being required to take a course in safe automobile driving during his junior year. An outdoor driving track and a large laboratory have been provided for instruction purposes under the direction of William A. Sears, former head of the auto shop department, who is now in charge of this activity.

The boys will spend a full shop period of 1½ hours one day a week for a semester in this safe driving course, according to present plans. Early instruction will take place in the laboratory where thirty half-chassis or front seats of salvaged cars are mounted on steel frames at regulation height. These used cars, obtained through the police department, have been stripped of rear seats, hoods, engines and tops. Only front seat, cowl, steering wheel and transmission remain.

Instruction problems will be presented visually. Special motion pictures illustrating traffic problems are to be taken from the front seat of a car. These movies will be projected on a screen in the front of the laboratory, and the thirty pupil drivers seated on the thirty half-chassis will make the mechanical movements they believe appropriate to meet the situation.

The transmission of each car is wired with a contact point so as to flash a light on an indicator board in the front of the room. There are seven of these covering the following

REW LINE STORE DRIVE WAY DRIVEWAY LIME/TOKE LIME / TORE (PLEC, TRAFFIC) KE W DRIVEWAY DRIVEWAY LAWN HE/ERT rew Galage TRANJFORMER HOU. LIME/TOKE DEIVE KEW LAW LIME / TOUT

Plan of automobile driving track just completed at Lane Technical High School, Chicago. Nine thousand pupils will be taught safe driving.

driving mechanisms: (1) clutch, (2) brake, (3) foot accelerator, (4) first speed, (5) second speed, (6) third speed and (7) reverse.

Each of the thirty cars are represented on the board, and as the thirty boys in each instruction group react to the traffic situation projected on the movie screen the appropriate light flashes. If it fails to flash or if the wrong light flashes the instructor can see at a glance who was wrong and in what way.

Slides will also be made from these films. A slide of a street intersection, for example, will test the pupil's powers of observation as to stop lights, traffic signs and other driving signals and regulations.

The purchase of fifteen new cars for the final outdoor instruction has been allowed by the Chicago board of education, and the school is hopeful that this number will be increased to thirty. Offers have been made, it is understood, by one or more automobile manufacturers to donate new cars for this purpose, but the school has thought it best to avoid any embarrassments by purchasing its own automobiles.

The driving track, the general plan of which is shown, occupies a former playground space that could easily be spared for the project. WPA labor has been used in breaking the ground and in preparing the track. A galvanized steel chain link wire fence, 6 feet high, encloses the area. A building formerly used as an acetylene generating plant was on the site and this has been converted into a six-car garage.

Drives are of asphalt bound macadam. They are constructed after the following formula: Four inches of 2-inch crushed white rock; 1 inch of screenings; 2 gallons to the foot of asphalt; 1 inch of chips; more asphalt; another layer of chips.

The safety drive has two straightaways; numerous curves and turns; a mound with 5 per cent grade for practice in going up and down hill; an alley to back in to and approach; an entry way into an alley garage limited as to space and swing; curb parking with restricted distance between cars; the six-car garage to get in and out of; a grease pit to drive up on, and a variety of traffic signals.

Four stop-and-go signals, with their control boxes, are in readiness for the first classes; there are also a "through street" stop light and a "slow" danger signal.

No arbitrary limits are to be set on the time a boy spends in preliminary laboratory instruction. He will be allowed his outdoor driving track work just as soon as he has mastered the laboratory lessons in safe driving.

Although many high school juniors already drive automobiles, they do not necessarily drive them safely, and it is the safety factor primarily and not the driving instruction that has led this large technical high school to equip its plant for such a course.

Two instructors will handle the 1,125 boys comprising the first class.

Economies in Floors and Stairs

Ten years ago when the University of Rochester was constructing some new buildings, it was decided to leave uncovered the concrete floors throughout some of the structures and in certain sections of other buildings. Original construction costs and subsequent maintenance expense were thereby reduced.

In order to assure permanent good appearance of these floors, according to William L. Wilson, Jr., a sealer composed of 60 per cent boiled linseed oil and 40 per cent turpentine was applied before the buildings were occupied. This preparation was thoroughly rubbed into the smooth concrete, completely filling all pores. The result of this treatment is a smooth, glossy and dustless finish on floors of this type.

The boiled linseed oil is the actual sealer. Turpentine was added to facilitate the drying of the preparation and to eliminate any stickiness that linseed oil alone would cause. The quantity of turpentine to be added depends upon the porosity of the concrete. The greater the porosity, the less turpentine is required. In this instance, the 60-40 ratio was found to be most effective.

Perhaps the important factor in the treatment was the application of the mixture. A piece of thick felt was clamped between two boards and a handle attached. This applicator was used to rub in the preparation thoroughly and evenly after it had been poured over the floors. Two and sometimes three applications of this sort were required in some locations to fill the pores completely and leave the desired finish.

There are two usual alternatives for the treatment of bare concrete floors: sodium silicate or a mixture of paraffin and linseed oil may be applied. Neither of these preparations, however, gave the desired effect so well as the boiled linseed oil and turpentine.

The maintaining of an attractive glossy finish is not difficult. Wet mopping is done daily or two or three times each week, depending upon the particular location involved, with a weak solution of warm water and soap powder. Floors are swept daily with a sweeping compound.

Ten years of constant use have demonstrated the effectiveness of the treatment given the floors. Their present glossy appearance and good condition seem to indicate that they have been sealed for all time. In any event the treatment can easily be repeated.

The stairs in the medical school buildings, for example, are made of ordinary paving asphalt, troweled smooth while still hot and bound on the edges by metal strips. The texture of the asphalt is such that the danger of slipping is minimized.

Besides the daily routine sweeping and washing with a weak soap solution, paraffin oil is applied to these stairs about once a year. To a quart of the oil is added two tablespoonfuls of lamp-black for coloring purposes, and a like amount of both turpentine and varnish, the former to eliminate any possible stickiness, and both to facilitate the drying of the preparation after application.

When Walls Leak

When walls are leaking, the following construction features should be checked. Was flashing placed under all copings, cornices and sills where water might collect and enter the wall? Are gutters and downspouts correctly installed? Are the materials used for flashings, gutters and downspouts suitable?

Are drips provided for all projecting surfaces? Are bed joints well filled and end joints fully filled with mortar? Do mortar joints have any ledges where water might collect and seep into the wall? Are there cracks where the mortar joins masonry units? Are the mortar joints thick?

Are mortar joints weathered, concave or "V"? These three types are most readily waterproofed. If they are raked, stripped or struck, was adequate waterproofing or pargeting provided? Are there any cracks in the wall from settling or faulty design?

St. Louis Serves Lunch

By CHARLES L. BARR

HE plan used in operating the lunchrooms of the high schools in the St. Louis public school system has not been materially changed since 1912. As the system developed, however, minor changes and additions were made. The fund through which lunchroom monies are handled has never shown a deficit, while the school child has received as well balanced and tasty a lunch as is humanly possible to produce. Further, records of the board show that accumulated surpluses approximating \$90,000 have been released to the board's funds as a partial repayment of initial costs. During the last five years the lunchroom sales have decreased considerably, mainly as a result of the depression. At the present time this condition is turning to the upgrade.

In February, 1912, the board of education adopted regulations which set forth in part as follows: "That the supply commissioner shall be responsible for the management of the lunchrooms and that he shall employ all managers and other employees of the lunchrooms subject to the approval of the board. The managers of the lunchrooms or any of the helpers may be suspended or discharged by the supply commissioner whenever the good of the service seems to him to require such action on his part."

These regulations, of which the foregoing is merely an excerpt, were broad and sweeping and the supply commissioner proceeded to establish the lunchrooms on a firm and substantial business basis in accordance with the regulations, taking into consideration at all times the educational and dietetic aspects necessary in the feeding of school children. At no time has a move been made in the procedure of serving school lunches that has not been carefully considered and

cooperation secured from the other executive officers of the board.

Naturally, the supply commissioner could not in person handle all the details of this large business. Therefore, as time went on, it became necessary for him to appoint a supervisor of lunchrooms to act as field manager or manager at large and a lunchroom clerk to care for the clerical work necessary in administration of the system. These two employees are paid

"The St. Louis Plan" is not set up as a standard, but merely to show how one large city handles its school lunchrooms. Mr. Barr, supply commissioner, aroused much interest at the autumn meeting of the National Association of Public School Business Officials by his description of the work of this department.

out of the school lunchroom fund. In addition, the inspector of supplies exercises general supervision and prepares specifications and plans for new lunchrooms and for new equipment or replacements to equipment.

Prior to June, 1919, the field organization was built on a basis of one manager for each lunchroom at a stipulated salary for the position, regardless of the size of the lunchroom or the responsibility entailed. With the thought in view of not only improving the system but also of allowing the managers remuneration compatible to their responsibilities, the following recommendation was

submitted to and approved by the board on June 10, 1919:

"1. That the lunchrooms in the high and intermediate schools be placed in groups of two each, considering the location and the amount of busines done; that each group of two lunchrooms be placed in charge of one manager with an assistant, responsible, of course, to the supply commissioner.

"2. That, in the selection of these managers, in order to obtain the highest efficiency, preference be given to those having received special training in dietetics and cafeteria work. In the selection of assistant managers preference be given to high school graduates who have specialized in the domestic science course."

In engaging a new assistant manager, she is placed in the lowest rank of assistant and works up during a period of years to the rank and salary of first assistant manager. When an opening occurs she is made manager at the first year's salary of that rank. During her terms in the various ranks of assistant manager she is expected to complete her education in institutional training and dietetics in preparation for later qualifying as manager. This procedure has proved successful. Up to the present time it has not been necessary to employ an outside manager because of the fact that the assistants have never failed to be ready for the opportunity when it came.

The actual preparing of foods, under the expert supervision and direction of the managers and assistant managers, is done by what is termed lunchroom help, consisting of head cooks, first, second and third assistant cooks, helpers and porters. The number of these employed in a lunchroom

SALARY SCHEDULE OF LUNCHROOM MANAGERS AND ASSISTANT MANAGERS, St. Louis Public Schools

First Year	Second Year	Third Year
Manager		
First rank\$12.50	\$13.00	\$13.50
Second rank 11.50	12.00	12.50
Third rank 10.50	11.00	11.50
Fourth rank 9.50	10.00	10.50
Fifth rank 8.50	9.00	9.50
Assistant Manager		
First rank 6.25	6.50	6.75
Second rank 5.75	6.00	6.25
Third rank 5.25	5.50	5.75
Fourth rank 4.75	5.00	5.25
Fifth rank 4.25	4.50	4.75
Lunchroom Help		
Head cook 3.95		
First assistant cook 3.35		
Second assistant cook 3.15		
Third assistant cook 3.00		
Helper 2.70		
Porter 3.65		

varies from eight to twenty-two, depending on the size of the school and its attendance. At the present time there are in the service five managers, four assistant managers, and approximately 130 cooks, helpers and porters.

The salary schedule in effect at the present time, adopted Sept. 8, 1936, is on a per day basis of 200 school days; it is shown in the table.

Before the operation of a lunchroom is possible it is necessary to
equip it. Unless a school lunchroom
can be made self-supporting, the
board of education will not sponsor
it, as the regulations plainly state:
"That lunchrooms may be maintained
by the board in such schools as shall
from time to time be designated, on
the condition that the board shall not
be put to expense on account of
them, except for the initial equipment
of permanent fixtures and furnishings, and that all other expense shall
be paid out of the proceeds of sales."

After the board has approved the prospectus of the new building, the commissioner of school buildings submits to the supply commissioner a sketch showing the floor space allotted to the lunchroom with a request to submit a list of all equipment needed, together with a layout showing the placing of the equipment. This layout is submitted in two sections:

1. On the first plan submitted by the supply commissioner all fixed equipment that requires electricity, water, steam or sewer connections is shown. This is necessary in order that the commissioner of school buildings may provide proper outlets and drain connections. This information is necessary before the complete building plans are drawn.

2. After the general contract is let for the building, the supply commissioner receives a set of the building plans from the commissioner of school buildings and all the equipment is then spotted or laid out. This should be done as soon as possible after construction is started. If, in placing the various items of equipment a slight change is necessary in the roughing in, there is still time to make minor changes. After the building has reached such a point in its construction that measurements can be taken, there is a final check-up made to determine whether or not the various pieces of equipment will fit exactly as drawn. At this point the final drawing for the purchase of the kitchen and dining room equipment and counters is made. All items of equipment are spotted on the drawing and details of construction shown. The equipment is then contracted for and installed according to these final plans and specifications.

The selection of equipment is guided by past experience, and nothing is placed in the kitchens that is not needed and in actual use. Care is exercised in placing the various items of equipment in order that the number of steps to be taken by the help in the kitchen may be reduced to a minimum.

Every effort is made to give the school child the type of food best suited to meet the needs of a growing boy or girl. In order to do this, candy, popcorn and soda water are eliminated from the menus and the child receives such foods as soup, vegetables, meats, rolls, milk, cocoa, salads and wholesome desserts. No attempt is made to establish any universal menus throughout the system nor are the same menus repeated at regular intervals.

The location of the school in relation to types and nationalities of pupils residing in its district has a peculiar psychologic effect in connection with the kind of menu served. As an illustration, one lunchroom might serve 50 per cent more salads than another lunchroom of similar size. Again, it might occur that one lunchroom would serve 50 per cent more bowls of soup than another. The aspect of the food and the manner in which it is put up have a great deal to do with the amount of its sale.

Too much stress cannot be put on the importance of training the pupils to eat proper foods. In an endeavor to attain this objective, attractive menus are presented and use is made of what is known in a commercial way as "leaders." By leaders are meant portions of food on which the lunchroom loses. Such items as chicken salad and creamed chicken on toast are served under this term.

Each portion of food, regardless of what it may cost, is sold for five cents. It is the duty of the supervisor of lunchrooms to see that the menus are varied, that the quality of food is of high standard, that it is being presented in the right way, and to make any suggestions to the manager for the betterment of conditions in the lunchrooms and success in their operations.

On the next page is a sample of one day's menu as posted in a high school lunchroom. This menu appeals to the pupil, and in just what proportion may be noted by checking the number of portions served on that day.

The doors of the lunchroom are opened at 11:30 a.m. and the last service of the first lunch period ends at 12 o'clock. Approximately 1,200 children are fed during this thirtyminute interval. As a matter of fact, the 1,200 children receive their first serving and are seated and eating in twelve minutes. At some schools it is necessary to have two lunch periods with the first at 11:30 and the second at 12:15, which allows thirty minutes for lunch and fifteen minutes for clearing up the lunchroom and replenishing for service in the second period. The boys are fed on one side of the room and the girls on the other.

At each entrance door are placed two cashier's desks where lunch checks are sold. The serving counter is divided into five sections. Upon purchasing their checks the pupils follow specified lines to the counter they wish to reach, take a portion of food off the counter and leave a check for it. This check is then deposited by the counter girl in the box for that purpose, which is back of the counter. At the close of the lunch periods all checks are counted and checked against the number of portions served. With the exception of soup, coffee, chocolate, cocoa and ice cream, all portions are counted when they are originally placed on the counter and are charged against the person having charge of that particular section. This especially refers to salads and similar portions that can be made up in ad-

The handling of the "exceptions" is interesting to note: The ice cream, being in quart bricks, is cut into a specified number of pieces. The coffee is checked by counting the empty cups that are placed on the coffee counter and the soup is checked by counting the empty soup bowls. There is, at times, a slight variation between the count of the portions charged to a section and the number of checks received over the counter, but such differences are negligible.

At the close of the day's business the money taken in for that day is counted, receipt slips in triplicate are made out and all are placed in a special locked money bag. A reputable bonded service company calls at each lunchroom daily and delivers this money bag on the following morning to the secretary and treasurer of the board. One of the receipt slips delivered with this money is given to the auditor, one retained by the secretary and treasurer and the third is sent to the supply commissioner.

On the last day of each month the manager takes an inventory of the foods in the lunchroom stock room, tabulates these on a special printed form and forwards it to the supply commissioner. It is then priced by the lunchroom clerk, one copy sent to the auditor, and the other retained by the supply commissioner and entered into the records as an asset of the lunchroom for that month. Bills for the purchase of foods are handled in a similar way. Each individual bill is signed by the manager and for-

ONE DAY'S MENU AS POSTED IN A
HIGH SCHOOL LUNCHROOM

Number of

Soup	Portions Served	
Vegetable soup		75
Meat		
Beef balls with potatoes	1	,869
Vegetables		
Broccoli		45
Cauliflower		56
Salads		
Salmon		14
Fruit		18
Deviled egg		26
Pineapple		19
Vegetable		13
Lettuce and tomato		31
Sandwiches		
Ham		450
Braunschweiger		
Toasted pimiento cheese		
Desserts		
Cherry cobbler		200
Fruit and gelatin		160
Fresh fruit		30
Devil's food cake		120
Ice cream with cholocal		
sauce	1	.924
Beverages		,
Bottled milk and sweet i	oll.	250
Hot chocolate and sweet	roll	63
Coffee and sweet roll		23
Fresh Baked Rolls and Bu		
TOTAL PROPERTY OF THE PARTY OF		

warded to the supply commissioner each week. They are then checked for any errors, approved, vouchered and then sent to the auditor for payment under the regulations of the board.

The item of purchasing supplies is taken up last for the reason that it is not only the most difficult task of the lunchroom system but the most difficult one to explain intelligently.

The regulations of the board pertaining to lunchrooms state in part:

"1. Supplies, other than edible supplies, shall be purchased under the rules of the board; and

"2. Edible supplies shall be purchased in the following manner: (a) whenever the quantity or kind of supply to be purchased makes it possible and advantageous, in the opinion of the supply commissioner, to purchase under bids and contracts, the purchase shall be so made and in the manner prescribed by the rules of the board for the purchase of other material; and (b) when the quantity or kind of supplies makes purchase by bids and contracts impracticable, the supply commissioner, at the end of each month, may authorize the manager or managers of the lunchrooms to purchase the estimated supplies needed for the following month, a list of which they have previously submitted on a requisition approved by him and he shall designate the places of purchase."

In the purchase of fruits and vegetables, great care is taken by the department in the selection of firms from which it buys. The supply commissioner designates to the manager of each lunchroom seven or eight firms from which the manager may select any three. Purchases can then be made directly from the companies selected, taking into consideration at all times quality and price.

The quality of produce purchased is required to be of a high grade and of a type that best suits the needs of the lunchroom in question. Upon delivery the merchandise is carefully inspected by the manager and if found faulty is promptly rejected. If a rejection occurs too often, if the

firm appears indifferent to the fact that a high grade of merchandise is desired, if the service offered does not meet with the needs of the lunchroom or if the prices do not conform with standard wholesale prices of the same quality of merchandise, they are taken off the list of suitable firms.

After considerable research and investigation in other fields, the board of education availed itself of the service offered by the government toward inspecting meat and meat food products purchased for the school lunchrooms. Accordingly, detailed specifications compiled in conjunction with the City of St. Louis and the U. S. Department of Agriculture were formulated. These specifications are issued once each month and call for a price to be submitted by the bidder covering a month's supply. The approximate amount of each type of meat and the schools to which delivery is to be made are set out in the specifications.

When an order is placed with the successful bidder the grader employed by the U. S. Government inspects the actual product at the source of supply; if acceptable, it is stamped by the grader with a stamp bearing a certain official monogram which is used for no other purpose. The cost of this government service approximates \$700 per annum but ensures the board of education of receiving exactly the grade of meat specified and bid on.

Canned fruits and canned vegetables are closely allied to other staple groceries such as sugar, beans and breakfast foods, and in the plan used for purchasing, these small orders of staples are taken into consideration, thereby rendering it possible to obtain slightly better prices by combination. This also assures prompt deliveries on emergency orders.

The representatives of various wholesale dealers are requested to call at the supply department, make quotations and submit samples. The grades of canned goods desired are not necessarily the finest grade such as would be purchased by hotels of the first class where meal prices are

high, but a commercially termed "extra standard" or "fancy" grade, which can be used to advantage in the St. Louis system. This is especially true of fruit where it is necessary to obtain a certain number of portions to the can.

Quotations are considered and grades approved by approximately six different firms and if prices are in line orders are placed by the supply commissioner weekly. The market is carefully watched for changes in prices. Weekly purchases necessarily mean that large amounts are not purchased at one time. The storage facilities of the schools are not adequate to care for a six months' or year's supply of this type of commodity.

Dairy supplies approximate 26 per cent of the expenditures of the lunchroom system and are carefully considered, purchased and inspected.

Milk, cream, butter and ice cream form the most important base of the children's lunches. These commodities are purchased annually by contract, under the rules of the board and by means of specifications approved by the superintendent of instruction, through the hygiene division, and by the city health department. Awards are made to the lowest bidders complying with these specifications. The plants of the successful bidders are thoroughly inspected, not only for hygienic reasons but to ascertain their ability to produce the requirements needed. Checks and tests are made at irregular intervals of the materials delivered.

Using as a basis the amounts expended in operating the lunchrooms, the following percentage applies: salaries, 37 per cent; equipment and expense, 8 per cent, and foods, 55 per cent.

Taking the 55 per cent as the amount spent on all foods, a division will show the following percentage of food sales: meat and fish, 26 per cent; vegetables, 3 per cent; soup, 2 per cent; sandwiches, 13 per cent; salads, 4 per cent; drinks, 4 per cent; rolls, 13 per cent; ice cream, 19 per cent, and desserts (other than ice cream), 16 per cent.

FOOD FOR THOUGHT

- A cafeteria court of appeals, in which students at the University of South Carolina may air their woes regarding the university's cafeterias, has been established through the appointment of a committee on cafeterias by Dr. J. Rion McKissick, president. The purpose of the committee is to see that sanitary conditions prevail and that proper dietary foods are served, and to act as a court of appeals. The committee is composed of faculty members.
- · Central control of finance and accounting predominates in school cafeterias judging from the results of a recent survey by questionnaire made by the finance committee of the Conference on Food Service Directors, Mary deGarmo Bryan, chairman. Thirty-seven school lunch directors, representing a total of 190 schools, replied. Central purchasing is done in 87 per cent of the cities and 11 per cent of the schools. This survey also showed that approximately half of a school's enrollment takes lunch in the cafeteria. Factors affecting lunchroom attendance are the single or closed session, length of lunch period and proximity of vendors or stores. The average net profit of the school cafeteria was found to be 5.66 per cent.
- The Chicago board of education has established a test kitchen in which all products purchased for the school cafeterias are tried out as to quality and uniformity. The kitchen is located in the Wells School, and Vivian Reading is in charge of tests. The kitchen has been in full operation only since September of this year.
- Typical lunch combinations in New York City high schools were compiled in booklet form and given as souvenirs at the Food Service Directors' Conference recently held in New York. The combination lunches range in price from 10c to 20c and the fractional cost of each item on the menu, as well as the total cost of the lunch, is given. Seven high schools supplied a lunch combination for the booklet, and a colored illustration of the luncheon tray accompanies each menu.

Also distributed to delegates at this conference was a compilation of recipes supplied by the delegates themselves. Each recipe embodies a lunchroom manager's idea of the one best 10c plate, 5c plate or 5c dessert suitable for school cafeteria service, and the exact cost of each item figured on a basis of 100 units. A limited number of copies of this bulletin of recipes are available at \$1 each.



Of course you wouldn't give Wyandotte as a Christmas present to your family or friends. But while you're enjoying a Merry Christmas in your home don't forget to give your business a Christmas present, too. Give it Wyandotte, and your business, and you, will enjoy a Happy and Prosperous New Year.

SEASON'S GREETINGS

THE J. B. FORD COMPANY . WYANDOTTE, MICH.

NEWS IN REVIEW

PWA Allotments

The forty-eight states and the territories of Hawaii and Alaska have been the recipients of loans amounting to \$89,136,319, and grants totaling \$174,576,261 for nonfederal educational building construction through the PWA, up to July 1, 1936. Projects for which money was given were 3,021 in number, accounting for 5,133 buildings. These buildings will provide 29,020 classrooms at a total estimated cost of \$461,923,907.

California, the state with the highest number of pupils needing housing, 154,-636, has 209 projects under way, to provide 562 buildings, 2,631 classrooms. The total estimated cost of this program is \$58,593,226, of which the government will provide \$31,075,607.

The largest amount of money has been allotted to New York State, for 131,679 pupils. Here 236 buildings will provide 3,240 classrooms at a total estimated cost of \$76,970,634, of which federal allotment amounts to \$53,914,344.

Texas received the third highest allotment, \$20,766,748. The total cost of its program is to be \$29,087,768, which will provide 2,253 classrooms in 437 buildings for \$89,440 pupils.

The state receiving the lowest allotment was Louisiana with \$142,900 toward a \$228,455 program. Here but five projects are under way to provide forty-one classrooms in six buildings. Second lowest is Vermont, where an allotment of \$205,223 will aid in a \$549,566 program to erect nine buildings with twenty-four classrooms for 946 pupils. Nevada is third lowest, where forty-nine classrooms in thirteen buildings are being erected at a total cost of \$534,457, of which \$215,757 is a federal grant and loan.

Alaska is erecting five buildings with ten classrooms to provide for 388 pupils at a cost of \$97,000. Hawaii is erecting six buildings to provide eleven classrooms for 240 pupils at a total estimated cost of \$267,815. Alaska has received grants and loans totaling \$64,000, and Hawaii, \$72,114.

BUILDINGS

Fair Exchange

It's a ten for one exchange at Wantago Township, Sussex County, New Jersey. The township recently voted a bond issue of \$99,000 for the erection of a consolidated school to replace the ten condemned rural schools now in use. The necessary construction costs will be met through the bond issue and \$81,000 from federal funds.

Fourteen Years Later

Condemned in 1922, the Hancock Street School at McAdoo, Pa., has this fall begun another year's service, and its final condemnation and wrecking seem still to be far in the future. The school district applied for and received a PWA grant for \$20,455, 45 per cent of the total estimated cost of construction of the needed twelve-room building. The school board, however, has but \$16,000 to add to the grant. The state department of education is being asked for the necessary \$10,000; if it is unable to come to the assistance of the district. the condemned school will continue in use indefinitely.

Day of Dedications

Six new buildings were dedicated at the University of Missouri on Missouri State Day, November 21, in a campuswide ceremony. The buildings dedicated were the Walter Williams Hall, an addition to the school of journalism; the student health center building at the medical school group; the new engineering laboratory building; the practice teaching building, which will house the university's elementary and high schools; a wing to the general library building, and the Wildlife Conservation Laboratory. All of these were financed jointly by the PWA and the state of Missouri, an expenditure of approximately \$1,500,000.

Fine Arts Campus

Before a distinguished company of drama, music and art authorities, together with official delegates from twenty-six universities and colleges, the University of Iowa dedicated its fine arts building and theater November 6 and 7.

First units of the projected fine arts campus, erected at a cost of about \$380,000, are among the finest of their type at an American university. Carnegie and Rockefeller funds, in addition to grants from the federal government and from private sources, defrayed the major portion of the cost.

The fine arts building is the central unit for a group of studios and contains a lobby, foyer, exhibition lounge, twenty-one studios, printing and lecture rooms.

Two smaller studio buildings are connected with the central structure by cloisters. In the first unit of the theater is an auditorium seating 500 persons. Latest ideas of stagecraft are incorporated—a revolving stage, set of wagon stages and special cyclorama. Workshops, classrooms and dressing rooms also are available.

ADMINISTRATION

County Superintendent, Kentucky

This will introduce the typical county superintendent of Kentucky, whose status has been studied by James W. Depp, a candidate for an advanced degree at Western Kentucky State Teachers College.

The head of county schools in Kentucky is 36.7 years of age. He has been 13.4 years in educational work and 5.2 years in his present job. His salary is \$1,895 a year and out of this he saves \$219 a year. He has a wife and two children. He belongs to a service club and to the Kentucky Education Association.

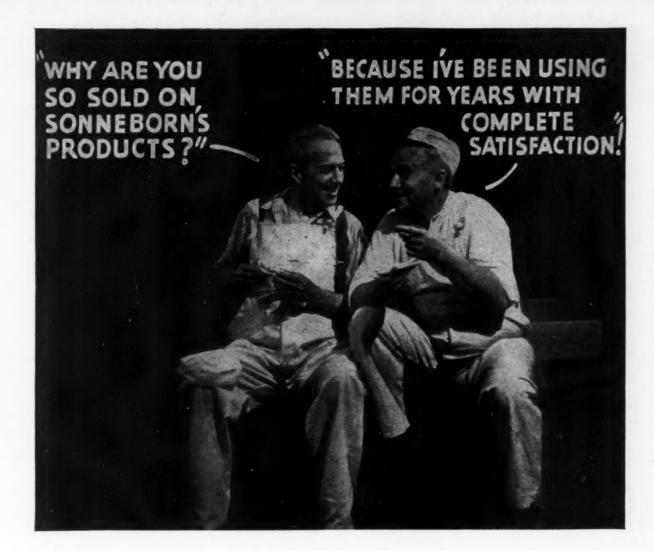
This school administrator has had both elementary and high school teaching experience, and very likely he has been a high school principal. City school superintendents in Kentucky earn more than this typical county superintendent, and county superintendents in most other states are paid more than he is. He holds a written contract, usually covering a period of four years.

If he is one of the lucky 34.1 per cent he has an income in addition to his salary. About half of his fellow county superintendents are home-owners and 16 per cent of them are now buying their own homes.

While the training of city superintendents in Kentucky is superior to that of the typical Kentucky county superintendent, there has been a material increase in the educational background of the county superintendent since 1928. The percentage of Kentucky superintendents possessing a bachelor's degree is higher than that for the country as a whole; the opposite is true when it comes to a master's degree.

Theft and Mutilation

The loss suffered by New Jersey libraries through the theft and mutilation of books and periodicals averages 11 per cent of the total annual appropriation for the purchase of new books and periodicals for these institutions. This staggering proportion was made public as the result of a survey of 144 libraries conducted by a committee from the state library association assisted by a



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committee from the state teachers' association.

Revealing that in 1935 more than 30,000 books, valued at more than \$41,-000, were stolen from libraries, and an additional loss of over \$6,000 was suffered through the mutilation of publications, the survey committee added that great variation had been found in the experiences of individual libraries. One of the larger libraries, for example, reported losses amounting to 50 per cent of its annual appropriation, while another, similar in size, reported almost no problem regarding theft and mutilation.

The committee felt that this loss was the result of community attitude rather than of library administration. It suggested that school administrators, principals and teachers inform themselves regarding the problem of theft and mutilation of books in their own school and public libraries.

Strikers Win Point

The four-day strike of 700 pupils of Memorial High School, Campbell, Ohio, during which time police once resorted to tear bombs to disperse pupils, is ended. Pupils returned to the school after it had been agreed that the school board and not the superintendent should decide whether a particular journalism instructor should be transferred to a grade school.

Back to School

The "school strike" in Walker County, Alabama, has come to an end, according to Associated Press dispatches. It is reported that the pupil walkout was started at union request when three federation teachers did not receive contract renewals, and that an investigation is to be made of the county school system.

Urban Movement

The Mingo school district northeast of Tulsa, Okla., has been annexed by that city following the filing of a petition signed by a majority of parents in that district. The bonded indebtedness of the Mingo district, \$20,500, and the assessed value of the district, \$360,843, were absorbed by the Tulsa board. Previously Tulsa had absorbed the school districts of Red Fork, Union, Turley and Dawson.

Feeding the Hungry

Ten trucks cover from 200 to 300 miles daily in and about the District of Columbia in order that the underprivileged child may not also be an underfed one. Eight thousand children in eighty-eight public and parochial schools are fed daily through an organization as detailed in its mechanism as a highly systematized chain restaurant.

In a central kitchen, located in a well ventilated building that once housed a manual training school, hot foods and sandwiches are prepared and packed for delivery to the schools. Labor-saving equipment, including even an electric potato peeler, aids in maintaining a high degree of efficiency in the kitchen. Ample space permits the storage of bulk supplies within a few steps of the workers.

On one side of a large room the hot food, usually soup or stew, is prepared. On the other side women make sandwiches. In the center of the room the lunches are packed scientifically in containers that keep the food hot and fresh. The packed food is placed on trucks and delivered to the schools.

Each driver's route and his itemized load is recorded on a blackboard, and in case of short deliveries a flying squadron stands ready to supply the missing items. This is a PWA project, and the women employed on it are required to pass stringent physical and personality tests to determine their fitness for work with food and children.

Bonfires Banned

Unanimous action has been taken by the San Gabriel Valley League in opposition to bonfires and also night rallies. The reasons for this action are hazards to spectators and property, and the probable occasioning of vandalism and interschool reprisals. This action is in line with the decree of the executive committee of the California Secondary Principals Association and other bodies.

PERSONNEL

Must Be Voters

Prefacing the new ruling with the statement that an educator "who does not vote is poorly equipped to prepare pupils for effective participation in a democracy," C. M. Donnelly, superintendent of schools at Montgomery, Ala., announced that in the future only teachers who vote at elections will be offered contracts with the city schools.

Remove Nuns from State Schools

The first step towards the complete elimination of members of religious orders from the state schools of Bavaria has been officially announced from Munich, with the statement that 600 nuns now employed as teachers in the state schools will be retired on January 1. This measure will have no effect upon schools owned by monasteries, but will eventually affect about 400 compulsory elementary state schools and 1,676 teachers.

FINANCE

Six Fat Years

An operating surplus for the sixth successive year is the record reported by the treasurer's office of New York University. The total income of the university during the fiscal year ending June 30, 1936, was \$7,274,770.95, of which \$6,204,700,21 was collected in students' fees. Gifts totaled \$471,716.28. After the university had met expenses and appropriations totaling \$7,271,-016.08, it showed a surplus of \$3,754.87. These figures were made public by William M. Kingsley, treasurer of the university for thirty-one years. The financial operations of all of the fifteen schools, colleges and divisions under the jurisdiction of the one university corporation are included in the report.

Month's Trial

The twenty-six public schools of Springfield, Ill., were closed from November 6 to 18 following defeat of a tax levy covering their operation. The schools reopened for a four-week trial period of a new financial program. A mass meeting, including thirty-seven civic organizations seeking to return the city's 12,300 pupils and 381 teachers to their desks, approved the program and presented it to the board.

Single Standard

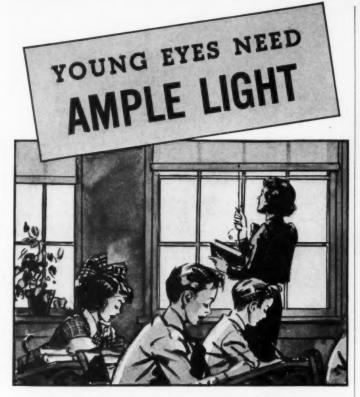
A single salary schedule for teachers in elementary, junior high and special schools of Palisades Park, N. J., has been adopted by the local board of education. The schedule calls for eleven annual increases, beginning at \$1,150 and reaching \$1,900 for normal school graduates. Teachers with a bachelor of arts degree will receive \$200 more than the normal schedule, and teachers with a master's degree, \$400 more. The schedule will become fully effective when funds are available.

"It Can't Happen Here"

But it did, and the financial committee of the school board of the Lake Crystal district, Lake Crystal, Minn., can now relax for four years if it wishes. According to a recent announcement, the indebtedness of the district has been reduced from \$90,000, the original bonded indebtedness on the new school addition, to \$42,900, representing the payment of \$47,100 or of bonds up to 1940.

Out of Debt

A red letter announcement, on the black side of the ledger—Iowa Wesleyan College, Mount Pleasant, recently announced that for the first time in fifty-five years the college is out of debt.



DON'T BLANKET SCHOOL WINDOWS WITH OPAQUE SHADES

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Thirty-six states require that 25% of the area of the school room be devoted to windows. Opaque shades rob these wise laws of their purpose. Improper shading puts needless strain on students' eyes, and seriously reduces student efficiency.

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"Tontine" is washable and waterproof. Its original beauty can be restored every summer by scrubbing with soap and hot water. All "Tontine" shades are extremely durable, and the special shade designed for school use is particularly long-lasting. Only reputable, authorized dealers distribute "Tontine." It has been installed by them in the leading university, private and public school buildings of the United States. Write us for samples and complete information.

Laboratory tests af translucency reveal: "Tontine" No. 500 Snow White transmits 73% more light than a similar color in painted cloth. "Tontine" No. 508 Afterglow Gray Green transmits 140% more light than a similar color in painted cloth.



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Classroom furniture should serve as a corrective of some of the physically harmful tendencies which any intensive educational program must inevitably impose on youth.

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Classroom posture posters and interesting pamphlets relating to healthful posture and eye-protection are available for teachers' use. Address Dept. No.12



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GIFTS

Pounds Sterling

The gift of 1,250,000 pounds received by the University of Oxford from Lord Nuffield, motor cat manufacturer, is said to be the largest gift ever received by a British university from an individual donor. The sum will be used to establish a postgraduate school of medicine. A further 100,000 pounds has been promised to the university by Lord Nuffield for the maintenance of the Bodleian Library and, of new laboratories of physics and geology.

Tercentenary Collects

The 300th anniversary fund of Harvard University has been subscribed to by 8,881 alumni and friends of the school to reach a total of \$2,774,972. Of this amount \$760,954 was subscribed unconditionally; \$523,696 for the support of university professorships; \$997,685 for the endowment of national scholarships, and \$492,636 for the encouragement of work in the physical sciences.

Three additional gifts, \$2,000,000 from Lucius N. Littauer for the support of instruction and research in public administration; \$350,000 from Carnegie Corporation in recognition of the tercentenary and in the interest of dental research and dental education; \$250,000 from Mrs. Frances Glessner Lee to establish the George Burgess Magrath Endowment for Legal Medicine, and a few minor benefactions, raised the sum to \$5,448,192.

For Maintenance

St. Louis University High School is to receive the residue of the estate of Mrs. Anna F. Backer who in 1925 gave \$500,000 for the construction of the school. After specific bequests have been made, the remainder of the estate is to be used for the support, maintenance and promotion of the school at the discretion of the school corporation.

COURT CASES

Liable or Not?

Coming up before the Iowa state supreme court is the case of Macken v. Bohn and the Independent School District of Fort Dodge. Last March, Laurence Macken, Jr., a pupil in the Fort Dodge schools, was injured while being transported to school by C. F. Bohn, employed by the board to transport pupils to school. Action was instituted against the board and Mr. Bohn for judgment in the amount of \$10,000.

The board and Mr. Bohn demurred on the grounds of nonliability. When the demurrer was sustained by the district court, the appeal was taken to the supreme court.

Broken Contracts

Suits to recover \$2,960 in salaries have been filed at the district court by teachers who claim that they had received contracts to teach in the school at Paden, Okla., in 1935, only to have them broken when a new school board was installed.

INSTRUCTION

Motor Transport

The Culver Fathers Association has presented to Culver Military Academy six new Dodge motor trucks to be used in a course in motor transport operation. Cadets drove the trucks from Detroit to Culver. The 1½-ton trucks have special steel bodies constructed to stand unusually rough usage, such as army trucks are subjected to in general maneuvers. Capt. Kemp Moore will be commanding officer of the new motorized unit.

Individualized School

Placing its emphasis upon the interests of its pupils and upon the individual's responsibility to the group, the newly established residential secondary school at Springdale Farms, Canton, N. C., is breaking with the traditional curriculum of the American high school.

The school, which admits boys and girls from eleven to fourteen years of age, opened on October 1. Its curriculum will center upon such problems as how to keep well, how to make a living, how to get along with other people, how to enjoy art and beauty, how to adapt one-self to an environment and develop a sustaining philosophy. Goals of attainment will be set by both pupil and school.

The school site is essentially a farm home, with pupils and faculty living in two large houses. The school has a well equipped library, general science laboratory, shop, class, music and recreation rooms, and facilities for riding, tennis, swimming and other sports.

Mailed Instruction

Those commercial, vocational and academic subjects not offered to high school pupils in various parts of Colorado because of local limitations will now be available through a system of supervised correspondence study on the high school level offered by the extension division of the University of Colorado. The service will provide required

courses in systems using the alternation scheme; give vocational or avocational training in schools that do not employ a teacher for those particular departments, and offers high school instruction under the supervision of the rural teacher in the rural school for pupils unable to attend a regularly organized high school. Work must be done under the supervision of a teacher, though it is not required that she be able to teach the subject being studied.

Lengthy Reports

Seventeen inches long and 8½ inches wide is the report card devised by the teachers in the schools at New Providence, N. J., in an attempt more adequately to meet the philosophy of progressive education and to bring pupils and parents into a closer relationship in the mutual understanding of pupil progress in the junior high school.

The card has two main divisions—academic accomplishments and character and citizenship accomplishments. Under academic accomplishments are listed the subjects offered in the junior high school, subdivided into from four to eight angles, each of which must be graded as satisfactory, unsatisfactory or improvement.

For example, algebra is graded on "is skillful in manipulating algebraic expressions; can solve problems by the use of algebra; understands meaning of positive and negative numbers; understands the relationship of algebra to mathematics."

The second division, that of character and citizenship accomplishments, covers cooperation, courage, courtesy, industry and perseverance, orderliness, originality, promptness, reliability and thrift. These have from one to four grading points each, as in cooperation, in which the pupil is marked on "helps carry out suggestions made by the class; helps keep school building and grounds neat; works and plays harmoniously with others." Pupils are graded five times a year, once every two months.

Sweet Learning

Vocational education might be said to reach its sweetest in the course in soda fountain technique at McKinley High School, Hawaii.

Educating to See the Familiar

A rural school, in which all of the pupil's time is planned for awakening in him an appreciation of the beauty of the familiar and a sense of the reality of his own life and surroundings as opposed to that projected on the cinema screen, is being conducted at Worfield, England, as an experiment in educating the rural child for life in rural areas.





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In Medart Lockerobes, "Teacher Control" means more than the mere simultaneous locking of all doors (a minor feature as wardrobe doors are rarely locked when in use during the day and under the super-vision of the teacher).

Lockerobe "Teacher Control" also provides simultaneous opening and closing of all doors by the operation of one pair of master control doors. Thus noise, confusion, and possibility of injury among pupils from individually operated doors, is avoided. Medart "Teacher Control" of the wardrobe problem is complete.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

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The school serves a wide district of farms and small holdings, the average pupil coming a distance of two miles to attend classes and consequently spending the day. Routine lessons are projected toward realism and beauty. Arithmetic classes, for example, gauge the size of a real haystack rather than the height of the Great Pyramid.

Advanced pupils, both boys and girls, have a flower, fruit and vegetable garden, and part of their school work is planned around the practical work done in the garden. Each gardener keeps a notebook in which he records the work in hand, charts wind, temperature and rainfall, and notes the progress of various experiments. A garden profit and loss account is kept, as are notes and drawings of special lessons and outside demonstrations given during the year.

A poultry club was established as a financial concern through the issuance of 100 shilling shares in the company.

Display of Patriotism

With the incorporation of 710-a into Article 27 of the New York State Education Law, the display of the American flag becomes requisite in the assembly rooms of every public school within the state. In order that this ruling may be properly complied with, the commissioner of education has circulated a sixteen-page pamphlet to each school containing the regulations, established by him according to the amendment's requirements, regarding the observance of the law: the definition of an assembly room; the material the flag must be made of; its size, manner and place of display; the pledge of allegiance; information regarding Flag Day, and other general instruction.

Rating Equipment and Attitude

"Alertness credits" is a system of school rating on the basis of equipment and progressive methods of instruction evolved by R. F. Cummings, superintendent of the Alna-Dresden-Edgecomb-Pittston-Wiscasset School Union, Maine, and used with enthusiasm on the part of teachers throughout his system. Participation in the ratings is entirely voluntary upon the part of the teacher, but it is believed that publication of the ratings in the town report will awaken townspeople to the physical needs of education in its progressive form.

Credits may be obtained on equipment and on the progress and attitude of the school. Each credit is worth 4 per cent. Equipment credits are ten in all, and may be obtained on reading table, sand table, school library, drawing board or easel, drinking facilities, washing facilities, sanitary conditions, relief of eyestrain, care of buildings and equip-



Opening of the Radio Workshop, New York University, with Chancellor Chase (seated); Dean Dearborn; William D. Boutwell, Office of Education, and the casting director.

ment, healthful temperature and ventilation.

The other fifteen points cover the socialized class discussion, pupils competing with their own records, class talks, mastery of tables and number combinations, notebooks and scrapbooks, creative work, release of pupil intelligence, discovery of special abilities, development of self-directed control, neatness of written work, fusion of studies, application of mental hygiene, activity units, adequate health program and playground supervision and games.

Foreign Correspondence

Administrators who are interested in having the pupils in their schools begin personal correspondence with pupils of their own age in foreign countries may address the International Friendship League, 41 Mount Vernon Street, Boston. The league, of which Edna MacDonough is executive secretary, has on hand the names, ages and addresses of boys and girls in sixty countries and territories. All names have been certified by the ministries of education. Many schools are cooperating with this league as an aid in the study of geography, history, sociology and economics.

Statewide Exams

Twenty-one states administer statewide examinations to pupils at the end of their elementary school period, a recent study by the U. S. Office of Education reveals.

In some cases the state department of education assumes only the preparation of the examination. In other cases it is concerned also with the procedure in the examination period and with the analysis of results. All or some of the counties in sixteen other states administer elementary school graduating examinations on a county-wide basis. State boards of education in several states have set up regulations for such tests.

The prospective high school pupil is usually tested in arithmetic, reading, spelling, English, history, civics, geography, physiology and hygiene.

Recommendations based on findings of this survey are as follows:

 That examinations which are used mainly to determine eligibility for graduation from the elementary school be discontinued.

2. That there should be flexibility in the testing program of each state, this flexibility to be brought about through legislative authority granted to state boards of education to make rules and regulations regarding standardization and supervision of elementary schools.

3. That when a need for better pupil guidance, knowledge of individual differences, or a check upon efficiency of the curriculum is felt in the states, a testing program should be established.

4. That the teacher, under the direction of the county superintendent and the state department of education, should give and score examinations, scores for different pupils to be made available to the county superintendent for use in compiling average scores by grades and in the supervision of instruction.

ADULT EDUCATION

Funds to Carry On

Two grants of emergency funds, one to further civic education for adults, the other to continue the work in education by radio, were recently announced by the U. S. Department of the Interior.

The sum of \$330,000 has been allocated to the Office of Education, which in turn will transmit funds to superintendents of schools who are organizing forum centers for demonstrating new methods of practical adult education. At the present time ten such centers are in operation and the grant will make possible the establishment of ten more centers.

The educational radio project, through its grant of \$113,000, will now be continued until June, 1937. This eightmonth-old project has demonstrated how public educational agencies can successfully use radio in the service of education, and now will create an educational script exchange service to aid local educational groups in producing good programs at the request of local stations. The project, in cooperation with the radio workshop of New York University,

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BROOKLINE **SCHOOL BURNS**

A SCANT hour after 1,600 pupils had left for the day, fire broke out and destroyed the Brookline High School, Brookline, Mass., Sept. 25. Damage was estimated at \$150,000.

Eleven firemen were injured, none seriously.

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to your school building if it is equipped with the Holtzer-Cabot "FIRE EYE" fire detector.

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operations.

New Atlas metal lathes are priced from \$39.75 to \$112.50. "Better to have several low-priced lathes and give more students a chance," say many shop teachers, "than one expensive model and a waiting line." New catalog of metal and wood lathes, drill presses, tools and attachments is now ready. Have your ascretary send for a copy. your secretary send for a copy.

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will also train individuals to handle the difficult techniques of writing and producing educational radio programs.

Study Center

A center for adult study, housed in a \$285,000 building, was dedicated at the University of Minnesota on November 13. The adult center contains, in addition to classrooms, a dining hall, chapel, recreation room, library and living quarters for 100 persons. The school, according to President Lotus D. Coffman of the university, will have no fixed curriculum. Courses will be arranged at the request of persons from over the state. When enough requests are received, a course will be instituted with a university faculty member in charge. Seventy-five persons are enrolled in the first requested course-cooperative management.

16 Accidents That Failed to Occur

Sixteen drivers who, statistically, should have been involved in automobile accidents during the past year were not involved, a result that has determined the continuation of the course in safe driving offered by the public evening schools of the Williamsport, Pa., school district. Fifty pupils who enrolled in this course have now been driving for little less than a year. Of these 31.9 per cent should have been involved in accidents by this time; instead, there has not been one reported accident concerning any of these drivers.

ANNIVERSARIES

Unite in Celebration

American Education Week was celebrated individually and collectively by the three New York City colleges which are under the direction of the board of higher education. The College of the City of New York, Hunter College and Brooklyn College, in addition to individual programs, united in an art exhibition and an evening of music.

Seventy-Five Years

"Across the years the unutterable dullness and ugliness of that boxlike room, its soiled and battered door, its dripping, moldy water pail and rusty cup, its frayed maps and dusty crayon, its worn and hardfaced teacher, rise ogre like" in the memory of Melvin E. Haggerty, dean of the college of education, University of Minnesota, who, in the first article in the diamond anniversary edition of the Minnesota Journal of Education, marking the seventy-fifth year of the Minnesota Education Association, makes a comparative study of schools, then and now.

With Dean Haggerty's "The Way We Have Come" setting the keynote of the issue, other articles cover the history of the curriculum in the state's schools, changes in pupil marking, changes in textbooks, changes in transportation, an historical overview of the education of

teachers, a story on the twenty-year-old Minnesota State High School League, the historical background of public school support and the story of junior college in the state.

Photographs taken at the first convention of the association in Rochester, in 1861, are reproduced on a four-page rotogravure insert.

Centenary

The hundredth year of its founding is being celebrated by the Black Top School, Guernsey County, Ohio.

VISUAL EDUCATION

Movies and the Private School

Organization of private school heads in New York City to extend the scope of visual education is being 'effected through the formation of the schools motion picture committee. The first meeting held in New York was attended by 100 headmasters and teachers and marked the initial program of a series of such gatherings at which the function of the motion picture film in teaching will be discussed, according to Rita Hochheimer, assistant director of visual education in the New York City board of education, who is helping formulate plans.

In addition to giving their pupils a better appreciation of the photoplay and formulating procedures by which cinema material seen outside of school can be used in class work, it is hoped that the private schools will organize a library of films accessible to affiliated members.

Believing in Seeing

Belief in the future of visual education, and of teachers and administrators who are specialists in the field of visual education, has led the school of education of Boston University to equip a special room and offer five courses on the subject. The collection, preparation and use of teaching aids; the management of a department of teaching aids; visual education in the teaching of nature study; visual education in the teaching of general science, and research in visual education are the five courses now offered.

From College to Films

Chinese boys and girls will no longer have to wait for the Chinese equivalent of a talent scout to discover them before they are given a chance to enter motion pictures; they will merely have to enroll in the school of cinematography to be opened at the Great China University.

The school will be incorporated under the social education division of the university, and courses will be offered in

Films for the School Screen

XVI - Peru

Peru — Rich natural resources, transportation difficulties and living conditions; geographical regions. 1 reel. 16 mm., silent. For purchase only. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

Land of the Incas — Life in the quaint and little known ports of Peru and Chile; through the ancient capital of the Incas; native women weaving paunchos; scenery. 2 reels. 35 mm., silent. For rent or purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

Wings Over the Andes — The Shippee-Johnson expedition to the land of the Incas; the discovery of the Great Wall of Peru; the Valley of Volcanoes; the Lost Valley of Colca; many ancient ruins dating back to the conquest of Pizarro four centuries ago; the fiesta held as a farewell to the "Flying White Gods" by a clan of Peruvian Indians. For rent or purchase. 3 reels. 16 mm., sound. Bell and Howell Company, 1801 Larchmont Avenue, Chicago.

Andean Byways—A trip through the interior of Peru and Chile via Transandean Railway. 1 reel. 16 and 35 mm., silent. Transportation charges only. Publicity Department, Grace Line, 30 Rockefeller Plaza, New York City.

Wonderland of Peru — Through the dead cities of the Incas; Lake Titicaca and the Islands of the Moon and the Sun; Cuzco, the city of the kings and throne of the Incas; ruins, tombs and specimens of art; Indian children at work. 2 reels. 35 mm., silent. For rent or purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

Over the Andes — Scenes of the country and people of Peru; Lima; busy streets, tropical markets, shops and traffic; low scrubbed vegetation and barren wastes of the mountains; native types; mountain ranges. 1 reel. 35 mm., silent. For rent or purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

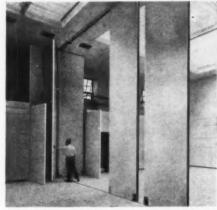
Q.C.f.

FAIRHURST

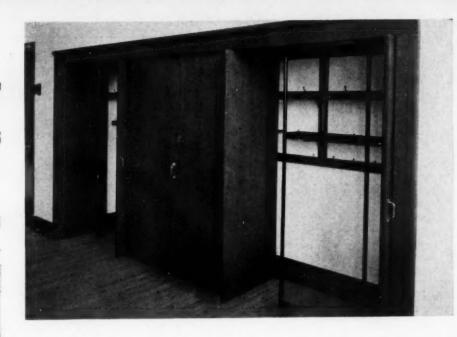
SCHOOL WARDROBES

AND FOLDING WALLS

Gymnasium, Yale University. Architect, John Russell Pope.

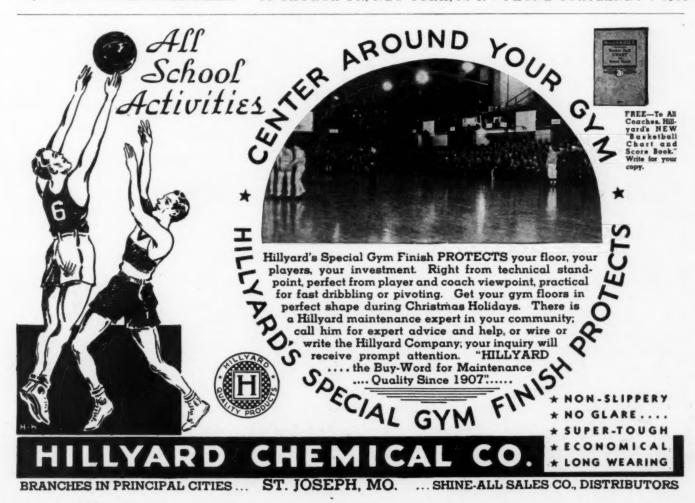


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directing, scenario writing, stage set-up, acting and photography. Members of the course will be apprenticed to the leading studios in Shanghai for association with directors, actors and actresses, and for personal guidance.

Sixteen credit hours a week will be given to the actual cinematography courses, and major emphasis will be placed upon practical work and studio apprenticeships. Movies will be produced by advanced students in the course. Eventually the course will be expanded to include developing, editing and otherwise handling the films. The course at the present time will be limited to twenty students enrolled for their bachelor's degree.

Aids in Appreciation

Educational and Recreational Guides, Inc., Newark, N. J., has recently published three more pamphlets to aid in the teaching of photoplay appreciation.

A guide to the study of the cinema version of "As You Like It" has been written by Max J. Herzberg, Weequahic High School, Newark, and is recommended by the motion picture committee of the Department of Secondary Education of the National Education Association. This guide is divided into four parts: From Sherwood to Elstree: the Elisabeth Bergner production; the play and the photoplay, and suggested

"The Photoplay as Literary Art," by Walter Barnes, professor of teaching of English at New York University, deals with the nature of the photoplay, factors conditioning the photoplay as art, esthetic principles of the photoplay and the way toward better photoplays.

"A Course of Study in Motion Picture Appreciation" has been prepared in outline form by Alice P. Sterner, Barringer High School, Newark, and Paul Bowden, East Orange High School, East Orange, N. J. It covers motion pictures from the point of view of their history, vocabulary, stories, types, acting, directors, sets, sound and music, and photography, and ends with units on seeing motion pictures and the value of motion pictures.

RADIO

Where There's a Will

Recognizing that the lack of radios in the schools of Rochester, Minn., is a serious handicap to modern methods of instruction, the parent-teacher association suggested a solution to the school district, which was accepted. The association provided radios and loud-speakers for the schools and the district board

On the Air During December

The following programs of particular interest to school people are arranged by the National Broadcasting Company, the Columbia Broadcasting System and the Mutual Broadcasting System. The time is Eastern Standard Time.

National Farm and Home Hour¹—12:30-1:30 p.m. (NBC-WJZ).

Wilderness Road-5:45-6:00 p.m. (CBS).3

Monday

American Education Forum—2:00-2:30 (NBC-WEAF).

History Series-2:15-2:45 p.m. (CBS). Dec. 7—Sacramento. Dec. 14—Sioux Falls.

Conversation Concerts, music by Bach and De-bussy played by E. Robert Schmitz, pianist, 3:30-4:00 (CBS). Treasurers Next Door-4:00-4:15 p.m. (CBS).

Children's Songs, Stories and Novelties, Dorothy Gordon—4:15-4:30 p.m. (CBS-WABC).

Safety Musketeers, talk, music and dramatiza-tion, U. S. Office of Education—4:00-4:15 p.m. (CBS).

Education-in-the-News, U. S. Office of Educa-tion-6:00-6:15 p.m. (NBC-WEAF).

Tuesday

Music of Famous Men and Women Series—2:15-2:45 p.m. (CBS).
Dec. 1—Jean Jacques Rousseau.
Dec. 15—Music of Kings and Queens.
Poetry Choir—2:15-2:45 p.m. (CBS).
Dec. 8—Whit Burnett, speaker.

Science Service Series, Watson Davis, editor-2:15-2:30 p.m. (CBS).

Dec. 15—Cincinnati Symphony Orchestra, conducted by Eugene Goosens, presents a concert for young people—3:30-4:30 (CBS).

The Coolidge String Quartet, presented by the Library of Congress—3:30-4:30 p.m. (CBS). Have You Heard? (Introductions to fascinating corners of natural science) U. S. Office of Education—3:45-4:00 p.m. (NBC-WJZ).

Education—3:45-4:00 p.m. (NBC-WJZ).

Medical Emergencies and How They Are Met, dramatized program, American Medical Association—5:00-5:30 p.m. (NBC-WEAF).

Dec. 1—Smog, Dr. W. W. Bauer, director, bureau of health and public instruction, American Medical Association.

Dec. 8—Heredity and Disease, Dr. Morris Fishbein, editor, Journal of the American Medical Association and Hygeia.

Dec. 15—Milk, Dr. W. W. Bauer.

Dec. 22—Gift of Health, Dr. Morris Fishbein.

Dec. 29—Health, Assets and Liabilities, Dr. W. W. Bauer.

ews of Youth, junior news dramatization—5:15-5:30 p.m. (CBS). Science in the News-6:00-6:15 (NBC-WEAF).

Wednesday

Geography Series-2:15-2:45 p.m. (CBS).

Dec. 2—The Polish Corridor.
Dec. 9—Pontine Marshlands and the Tiber
Port.
Dec. 16—A Stormy Christmas at Bethlehem.

Dec. 16—A Stormy Christmas at Bethlehem.
Growth and Development of the Child, National Congress of Parents and Teachers in cooperation with the American Academy of Pediatrics—4:00-4:30 (NBC-WJZ).
Dec. 2—Does Life Beget Life, Amos H.
Hersh, associate professor of biology, Adelbert College, Western Reserve University.
Dec. 9—Measurements of Growth, Harold C.
Stuart, assistant professor of pediatrics and child hygiene, Harvard Medical School.
Dec. 16—Individual Variations in Infants and Children, Alfred H. Washburn, director, child research council, University of Colorado.

and Childres, Affect H. Washurn, affector, child research council, University of Colorado.

Dec. 23—Food and Growth, E. V. McColium, professor of biochemistry, Johns Hopkins School of Hygiene and Public Health.

Dec. 30—Chemical Elements and Their Part in Body Growth, S. Z. Levine, professor of pediatrics, Cornell University Medical College.

Institute of Music-4:00-4:30 p.m.

Our American Schools-6:00 p.m. (NBC-WEAF).

Cavalcade of America, dramatization of sig-nificant moments in American History— 8:00-8:30 p.m. (CBS).

Thursday

Academy of Medicine-2:30-2:45 p.m. (CBS).

Academy of Medicine—2:30-2:45 p.m. (CBS).

Music, Literature and Science Series—2:152:45 p.m. (CBS).

Dec. 3—Why Don't We Feel the Air Pressure? and A Trip to the Southern Mountains (Primary).

Dec. 10—The Christmas Nightingale (Intermediate), and A Winter Day (Primary).

Dec. 17—Which Exerts More Pressure, Cold Air or Warm Air? and Bringing in the Yule Log (Primary).

Coolidge String Quartet. presented by the Li-

Coolidge String Quartet, presented by the Library of Congress—3:30-4:30 p.m. (CBS).

Answer Me This—4:45-5:00 p.m. (NBC-WEAF).

Rochester Symphony Orchestra, conducted by Jose Iturbi—8:30 (NBC-WJZ).

America's Town Meetings of the Air—9:30 (NBC-WJZ).

Music Appreciation Hour, under the direction of Walter Damrosch. Series A and C, 2:00-2:30 p.m., alternating weekly; Series B and D, 2:30-3:00 p.m., alternating weekly. (NBC-WEAF, WJZ).

(NBC-WEAF, WJZ).
Vocational Guidance and Current Events Series
-2:15-2:45 p.m. (CBS).
Dec. 4—Most Jobs Involve Repetitive Activity, and Current Events.
Dec. 11—How Can We Make More Jobs? and Current Events.
Dec. 18—Goods Must Be Sold, and Current Events.

Cincinnati Symphony Orchestra - 2:45-4:30

General Federation of Women's Clubs Series—2:45-3:00 p.m. (NBC-WJZ).

The Philadelphia Orchestra, Leopold Stokowski and Eugene Ormandy, conductors—10:00-10:30 p.m. (CBS).

Saturday

Cincinnati Conservatory of Music, directed by Alexander von Kreisler—11:00-12:00 (CBS). Our American Schools-11:00 a.m. (NBC-WEAF).

Magic of Speech-11:30-12:30 p.m. (NBC-WEAF).

Beethoven and Chopin Sonatas, played by Alexander Semmler, pianist—10:30-11:00 (CBS).

Music and American Youth Broadcasts, Music Educator's National Conference—10:30-11:00 Educator's Na (NBC-WEAF)

he World Is Yours, Smithsonian program—11:30 a.m.-12:00 m. (NBC-WJZ).

University of Chicago Re 1:00 p.m. (NBC-WEAF). Round Table-12:30-

French News Exchange, transatlantic broad-cast—1:30-1:45 p.m. (CBS).

Pittsburgh Symphony Orchestra, directed by Antonio Modarelli—2:00-2:45 p.m. (CBS).

Antonio Modarelli—2:00-2:40 p.m. (CBS).

New York Philharmonic-Symphony Orchestra,
directed by John Barbirolli and guest conductors—3:00-5:00 p.m. (CBS).

Romance of '76—8:30-9:00 p.m. (NBC-WJZ).

Ford Sunday Evening Hour, Fritz Reiner, conductor—9:00-10:00 p.m. (CBS).

General Motors Concerts, Erno Rapee, ductor—10:00-11:00 p.m. (NBC-WEAF).

¹Except Sunday. ²Monday through Friday. ³Also Wednesdays and Fridays.

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assumed the cost of wiring the buildings, a cost which ran from \$15 to \$33.60 per

Program Proceedings

Once again the pamphlet reports of the "America's Town Meetings of the Air" are being published by the American Book Company, Cincinnati. The proceedings of the meetings, in this form, may be purchased for ten cents each, and any individual broadcast or the entire series may be obtained.

Wisconsin Broadcasts

The Wisconsin College of the Air has opened its fourth broadcasting season with courses on agriculture, books, economics, speech, homemaking, anthropology, psychology, travel, music, world affairs and vocational education. Certificates of achievement are awarded by the college to those who enroll in the courses and pass an examination at the close of the thirty week period. Lessons are a half-hour in length.

The Fourth Year

With three years of program broadcasting to its credit, the school system of Evansville, Ind., opened its fourth year on November 18 with a new series, entitled "You and Your Schools," intro-

Coming Meetings

Dec. 2-5—American Vocational Association, San Antonio, Tex.

Dec. 10-12-National Conference on Educational Broadcasting, Washington, D. C.

Dec. 12—Delegate Assembly, Nebraska State Teachers' Association, Omaha.

Dec. 28-30—Illinois State Teachers Association, Springfield.

Dec. 28-30-Oregon State Teachers Association, Portland. Dec. 28-30-Pennsylvania State Teachers

Association, Harrisburg. Jan. 18-National Committee on Education by Radio, New York City.

Feb. 4-6-Oklahoma Education Association,

Feb. 17-20—American Council of Guidance and Personnel Associations, New Orleans.

Feb. 20-25—Department of Superintendence, National Education Association, New Or-

Feb. 20-25—American Physical Education Association, New York City.

Feb. 25-27—Progressive Education Association, St. Louis.

Feb. 26-27—American Association of Junior Colleges, Dallas, Tex.

Feb. 27—National Advisory Council on School Building Problems, New Orleans. April 7-10—North Central Association of Colleges and Secondary Schools, Chicago. April 21-24—American Physical Education Association, New York City.

March 18-20-Florida Education Association, Orlando.

March 30-April 3-Association for Adult Education, San Antonio, Tex.

May 7-8—American Council on Education, Washington, D. C.

June 27-July 1-National Education Association, Detroit.

duced by the theme music, "School Days." These programs, which are a half-hour in length, are twofold in purpose. They are pointed to acquaint the listening parent with various phases of school life and to give pupils an opportunity to participate in the field of broadcasting. A check-up last year revealed 1,000 families tuning in the first three broadcasts.

NAMES IN NEWS

New Superintendents

J. COLIN ENGLISH, supervising principal of schools at Ocala, Fla., will become state superintendent of public instruction for Florida on January 1, succeeding W. S. CAWTHON, who held the position for twelve years.

H. M. ROWLAND is the new superintendent of New Hanover County Schools, North Carolina. Mr. Rowland, who was superintendent of schools at Burlington, N. C., was selected to succeed the late RAY FUNDERBURK. He has been succeeded at Burlington by L. E. SPIKES, superintendent of Rutherfordton-Spindale schools. C. A. DEN-TON has been appointed superintendent at Rutherfordton-Spindale.

JOHN KOPP, assistant principal of the school at Lykens, Pa., has been elected superintendent of schools for the joint Williams Township and Williamstown schools. He succeeds L. J. KLINE, who resigned to accept the supervising principalship of the school at Camp Hill, Pa.

NATHANIEL LOVE, superintendent of schools at Littleton, Mass., has been appointed superintendent of schools at Ipswich, Mass., where he succeeds the late JOSEPH I. HORTON.

Dr. STANLEY REEVES, supervising principal at Live Oak, Fla., has been appointed superintendent of schools at Avon Park, Fla.

C. C. CARVER, superintendent of schools at Vickery, Tex., has been appointed superintendent of schools at Carrollton, Tex.

State Departments

RALPH A. Howard has been appointed supervisor of vocational education for the state of Ohio to succeed RAY FIFE.

EDWARD P. SMITH, assistant director of the division of examinations and inspections of the New York State Education Department, has been named acting director to succeed Dr. AVERY W. SKINNER.

H. J. Bowers, superintendent of schools at Williamsport, Ohio, has accepted an appointment as assistant to FRANK E. WILSON, supervisor of Ohio's division of publications. Mr. Bowers'

work will be concerned with certification. H. L. Sams succeeds him at Williamsport.

City Departments

HARRY I. GOOD, director of commercial education in the high schools of Buffalo, N. Y., has been appointed associate superintendent of schools in charge of secondary education.

R. G. Jones, former superintendent of Cleveland schools, has been appointed to the newly created position of supervising director of guidance in the senior high schools of that city.

Federal Departments

JOHN ARTHUR RANDALL has been named director of the division of educational aid of the National Youth Administration.

PAUL W. EDDY, superintendent of schools of Punta Corda County, Florida, has been appointed director of adult education for the WPA in Florida. This is the first time a schoolman has headed this work since it was begun in the state.

JOE A. YOUNGBLOOD, superintendent of schools at Palm Beach County, Fla., has been appointed state director of the NYA to succeed R. C. Beatty whose leave of absence from the University of Florida has come to an end.

RAYMOND I. EDWARDS of Portland. Ore., has been appointed state supervisor of recreation under the WPA. He has recently taken up his work in the office of the state department of education.

Private School Personnel

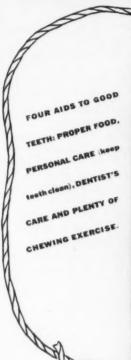
THE REV. TERTIUS VAN DYKE has become headmaster of the Gunnery School, Washington, Conn.

EARLE HITCH, for many years director of publications at Culver Military Academy, has returned to professional journalism and is now associated with the Press-Citizen, Iowa City, Iowa.

New Presidents

DR. EDMUND E. DAY, director of the social science division of the general education board of the Rockefeller Foundation, will succeed Dr. LIVINGS-TON FARRAND as president of Cornell University next June. Doctor Day's career in the field of higher education covers a period of thirty years, during which time he has been associated with Harvard University and the University of Michigan, serving as the first dean of business administration in the latter institution, later becoming dean of the university.

RICHARD C. FOSTER, a lawyer of Tuscaloosa, Ala., was elected president of the University of Alabama. He will take office January 1, succeeding Dr. George H. DENNY, president of the university





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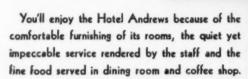
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for twenty-four years, who in turn has been appointed chancellor, a new office created by the board.

DR. MERLE S. WARD was inaugurated as president of Ferris Institute October 10. DR. W. D. HENDERSON of the University of Michigan, and formerly a member of the Ferris Institute faculty, was the inaugural speaker.

Dr. A. T. Belknap, dean of education at the State Teachers College, Mansfield, Pa., has been appointed president of the college to succeed the late W. R. Straughn.

Miscellaneous

WILLIAM McAndrew will be the recipient of the 1937 American Education Award made annually by the Associated Exhibitors at the Department of Superintendence Meeting in February.

LEON H. NEULEN, superintendent of schools, Camden, N. J., was reelected president of the New Jersey State Teachers Association, which met in Atlantic City, Nov. 13 to 16. The following officers were also reelected: Mattie S. Doremus of Paterson, first vice president; Ella J. Hamilton of Atlantic City, second vice president; Solomon C. Strong of West Orange, secretary, and Catharine M. Zisgen of Trenton, treasurer.

Francis Trow Spaulding, professor of education, Harvard University, has become associated with Dr. Ellwood P. Cubberley in the editorship of the Riverside Textbooks in Education, a publication of Houghton Mifflin Company. Doctor Spaulding is associate editor of the Journal of Educational Research and a member of the National Committee on Research in Secondary Education.

THE REV. MICHAEL A. CLARK, S.J., formerly principal of Loyola High School, Baltimore, has been appointed regional director of secondary schools for the Middle States and Maryland Division of the Jesuit Educational Association. Father Clark succeeds the Rev. EDWARD B. ROONEY who has been named regional director of colleges and universities.

GEORGE EARL BROWN, superintendent of schools in Ocean City, N. J., has been elected governor of the fiftieth Rotary district, the second largest district in the international organization. It includes Delaware, Southeastern Pennsylvania and South Jersey.

RANDALL J. CONDON displayed great interest in the School for Crippled Children during his superintendency of Cincinnati schools, and he was honored recently when the board of education changed the name of the school to the Randall J. Condon School.

WAYNE G. BENEDICT of Hamilton,

N. Y., has been made president of the New York State Association of School Superintendents.

College Departments

PROF. A. ANTON FRIEDRICH, a member of the department of economics of New York University, was appointed director of the division of unified studies in Washington Square College. He succeeds Harlan Logan, who was given a leave of absence from the university to become editor of Scribner's Magazine.

DR. ALBERT S. RAUBENHEIMER, professor of education, has been appointed acting dean of the college of letters, arts and sciences at the University of Southern California to succeed the late DR. FRANK C. TOUTON.

JOSEPH E. GIBSON, superintendent of schools at McComb, Miss., has been appointed professor of education at the college of arts and sciences, Tulane University.

TERESA C. YEAGER, chief of the kindergarten and elementary education division of the Pennsylvania Department of Public Instruction, has been appointed head of the department of education at the state normal school in Fredonia, N. Y. CECELIA U. STUART will succeed Miss Yeager in the state position.

Deaths

DR. EZRA S. TIPPLE, president emeritus of Drew University, Madison, N. J., died at his home in New York City. Doctor Tipple was in his seventy-sixth year. He had been president emeritus of Drew University since 1933.

DR. CHARLES FORDYCE, professor emeritus of educational measurements and research at the University of Nebraska and one time president of the Nebraska State Teachers Association, died just thirty days after the university gave him the title of emeritus.

JOHN H. HILL, president emeritus of West Virginia State College and well known Negro educator died at Charleston, W. Va., at the age of eighty-four.

James F. Chapman, superintendent of schools of Indiana County, Pennsylvania, died from injuries received in an automobile accident in which Joseph E. Weaver, assistant superintendent of schools, Mrs. Weaver and Mrs. Chapman were also injured. D. Lester Winger, the other assistant superintendent who has held that position for thirteen years, has been elected to succeed Mr. Chapman.

MARK B. FURMAN, district superintendent of schools, Rochester, N. V., died at the age of fifty-nine. Mr. Furman had served as district superintendent since 1922, and was active in the development of the rural school system of western New York. He also served

as president of the New York State Teachers' Association.

FRANK L. SMART, superintendent of schools at Davenport, Iowa, for thirty years, died at his home following an extended illness. IRVIN H. SCHMIDT, appointed assistant superintendent in September, will fill the vacancy.

ALBERT M. DEVOE, state superintendent of public schools in Iowa from 1911 to 1919, when he retired, died recently.

RALPH MOSHER, superintendent of schools in North Tonawanda, N. Y., died recently. He was appointed principal of the Tonawanda High School in 1905, a position he held until 1935 when he was appointed superintendent of schools.

GEORGE T. SHOENS, formerly superintendent of schools for the provinces in the Philippine Islands, died on October 15 at the age of sixty.

DR. C. J. Scott, superintendent of schools at East Orange, N. J., died suddenly at his home on November 11. Doctor Scott was fifty-six years old.

R. W. LANGFORD, superintendent of the high school at Brewton, Ga., died suddenly after an illness of only a few days' duration. Mr. Langford had just begun his second year as superintendent.

MARION GERALDINE CLARK, former supervisor of junior high and upper elementary schools, Montclair, N. J., and an instructor in history at Teachers College, Columbia University, died recently.

CHARLES W. MOORE, principal of Public School 87, Bronx, N. Y., died at the age of 68. Mr. Moore had been associated with the public school system of New York for forty years.

MALVINA LIEBERMANN, principal of Public School 217, Brooklyn, N. Y., died in that city. Miss Liebermann had been connected with the New York school system for thirty-four years.

ARTHUR G. WAIDELICH, who in September began his first year as principal of the Culver City-Palms Alexander Hamilton High School, died of a heart attack in a Culver City, Calif., hospital, where he had been rushed after an attack in his school office an hour earlier. Mr. Waidelich was forty-six years old.

DR. JOHN H. LOGAN, superintendent of schools, Newark, N. J. and former commissioner of education for the state of New Jersey, died at the age of fifty-nine following a heart attack. During his association with the Newark school system, Doctor Logan established a department of reference and research to gather information on educational procedure.

MARY A. CONLON, principal of Walton High School, The Bronx, N. Y., died following an operation for appendicitis. Miss Conlon had been identified with the New York City public school system for nearly forty years.

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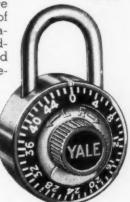
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Only four motor cars were registered in the United States in 1895. In 1904, only two in Kansas City—and they had a head-on collision!

EDITOR'S SELECTIONS of books just published; ideal for school libraries and Christmas giving: WAGONS WESTWARD, by Armstrong Sperry, author of ALL SAIL SET (\$2.00) (12–18); A DOG AT HIS HEEL, by Charles J. Finger, Newbery Medal winner (\$2.00) (12–18); CORPORAL COREY OF THE ROYAL CANADIAN MOUNTED, by Jack O'Brien, author of SILVER CHIEF (\$2.00) (13–18).

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NOTES FOR BUYERS ...

Over Their Heads

A new roof is over the heads of some schoolmen before it is ever laid. It can cause so much confusion in their upper stories that, like as not, they'll order a club sandwich and then accept a hunk of cheese between two slices of rye.

A club sandwich has three layers of chicken, ham and lettuce-tomato between four layers of toast—seven layers in all. The satisfactory three-ply roof is just like a club sandwich—three plies of felt and four courses of asphalt. Some sharp-dealing contractor may serve his patron one ply of felt between two courses of asphalt and call it a three-ply roof. What the school is getting is a three-course roof, just a plain sandwich in its elementary form. (We have been served sandwiches from this very felt and asphalt recipe.)

Why don't schoolmen recognize that many roofing matters are over their heads and go for guidance to some reliable firm like Johns-Manville, 22 East 40th Street, New York City. J-M even has approved standards for roofing contractors so that its own fine materials will be honestly and competently laid.

Distress in the Afternoon

School stoves, such as the Vulcans, whether for domestic science class or cafeteria kitchen use, have a different mission from that of short order stoves, and it must hurt the Standard Gas Equipment Company, as it does us, to have these fine stoves made responsible for Distress in the Afternoon.

This company at 18 East 41st Street, New York City, has newly improved heavy duty ranges and small sized hot plates for school kitchens. It could sell schools deep fat fryers, hamburger griddles and other lunch wagon equipment, but it won't try. It has saner ideas on school cooking than a few of the "red hot" managers who have stolen into the school feeding field.

How to Keep Young

This, we warn you, is not front page stuff. Virtue seldom merits more than a minor headline. An occasional octogenarian will rate a paragraph if he can attribute his long life either to chewing tobacco or to eschewing alcohol.

Recently we sought an interview with our favorite octogenarian, at 100 Cooper Street, Camden, N. J. "I attribute my vigor and sound health," the eightyyear-old Esterbrook told us, "to my constant association with young people. School children get to know my good points early in the grades. They select some particular point that takes their fancy, and after that they write with increasing fluency. I enjoy the confidences of these youngsters, and I give them my truest steel. Some of my earliest school boy friends are granddads now, and they judge Esterbrook the best on all points. If you want to keep young and happy, play some vital part in the education of the young."

Toil and Trouble

Trouble Shooter is the school custodian's real name, and a lot of his calls come from the Tempus Fugit Department. Classroom clocks begin to scatter and bell signals grow faint upon the air. That means the batteries need recharging again.

We've half a mind to tell you how to put a stop to this sort of business. Brother, you don't have to operate your clocks, bells, telephones and fire alarms from batteries if you don't want to. There's a neat little device called the Rectifilter that substitutes for batteries. You plug it into 110 volts AC and attach the wires that used to connect to the battery to the proper Rectifilter terminals, whereupon AC is inverted into DC. Then you lock the thing up and forget it for years upon end.

That's everything we are going to tell you about it; other points that may be equally to your advantage you can learn by writing the Raytheon Manufacturing Company, Willow St., Waltham, Mass.

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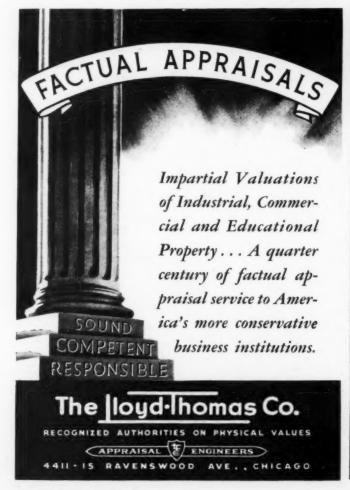
The beauty of this new valve is that it is adaptable to existing heating systems when heating satisfaction is low because of lack of "balanced" steam distribution. After the valve is once installed, the needed adjustments to secure correct balancing can be made without interrupting the heating service. Moreover, it is packless and leakproof. The C. A. Dunham Company, 450 East Ohio Street, Chicago, knows the value of good valves in school plant anatomy.

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LIBERTY VS. EQUALITY. By William F. Russell. New York: The Macmillan Company, 1936. Pp. ix+173. \$2.

Attempts by analogical reference to European cultures and practices to show how education in the United States can be centralized as to external controls and decentralized as to teaching controls.

Today's Economics. By Harold S. Sloan. New York: Prentice-Hall, Inc., 1936. Pp. xi+339. \$1.68.

Simplified and exceedingly clear, well balanced text for the beginner in economics. Graphic aids increase student value.

THE SYMBOLS OF GOVERNMENT. By Thurman W. Arnold. New Haven: Yale University Press, 1935. Pp. vi+278. \$2.50.

Those who are interested in the rational analysis of government in an attempt to develop a more realistic approach in this confused area will find this book unusually stimulating.

THE EFFORTS OF THE STATES TO SUPPORT EDUCATION. As Related to the Adequacy of Financial Support Provided and the Ability of the States to Support Education. By Lyle Walter Ashby. Washington: National Education Association, 1936. Pp. 63. (Paper cover).

An attempt to appraise the efforts of the states to support education in terms of a formula developed by the author. A PLACE IN THE SUN. By Grover Clark. New York: The Macmillan Company, 1936. Pp. xv+235. \$2.50.

Does the imperial tradition pay? Are colonies productive? Emphatically "no" is the conclusion presented here. A scholarly and dispassionate treatment of a series of traditional assumptions and costly political practices. Should be collateral reading in every secondary school library.

THE CONQUEST OF YUCATAN. By Frans Blom. Boston: Houghton Mifflin Company, 1936. Pp. xi+238. \$3.50.

Fascinating story of the conquest of the Mayas by the Spanish. Descriptive reconstruction of the Mayan culture in a manner so interesting that this book deserves a place in upper secondary school libraries.

A LAY VIEW OF SOME OF THE PROBLEMS OF HIGHER EDU-CATION. By Mark Eisner. New York: The Dial Press, 1936. Pp. 79.

Collection of public addresses on higher education by an eminent layman.

ARE AMERICAN TEACHERS FREE? An Analysis of Restraints Upon the Freedom of Teaching in American Schools. By Howard K. Beale. Report of the Commission on the Social Studies, Part XII. New York: Charles Scribner's Sons, 1936. Pp. xxiv+856. \$3.50.

Unusual zeal and ability on the part of a capable author have resulted in a most unusual book. That every teacher and administrator should read it is almost needless to suggest. It needs reading and interpretation from a realistic view of democracy in action.

LEARNING AND TEACHING HISTORY IN THE MIDDLE GRADES.

By Mary G. Kelty. Boston: Ginn and Company, 1936.

Pp. viii+694. \$2.40.

This book is comprehensive and excellent in the material it covers. It gives in detail the objectives to be achieved, and the organization of a workable program. Various types of tests and activities are given with full explanation. The material, however, for the most part is too difficult for children in the middle grades; it is much better suited to low and middle groups in junior high school. There are some worthwhile suggestions for late elementary teachers which could be used particularly with high groups.

